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AUTHOR Cordrey, LeRoy J.
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ABSTRACT

As part of an effort to develop a nontraditional alternative educational program for mentally gifted and talented students at Fullerton College, a study was conducted to determine the characteristics of 72 self-identified gifted students and to look at differences between high potential-low achievement students and high potential-high achievement students. Participants were asked to complete a battery of tests and questionnaires including the California Psychological Inventory, Study Attitudes and Methods Survey, Myers-Briggs Type Indicator Form G, Short Form of the Multiscore Depression Inventory, Modified Maslach Burnout Inventory, Beck Depression Inventory, Cognitive Style Questionnaire, and Student Academic Maintenance Study. In addition, academic records from college and high school were examined, and almost all participants were interviewed. The study revealed that the participants: (1) were unclear in their educational motivations and objectives; (2) demonstrated various skill deficiencies in cognitive processes; (3) manifested high "need for achievement" and low achievement on life tasks and academic performance; (4) manifested cognitive styles customarily not associated with high performance in standard academic institutional processes; (5) were likely to be "high risk" students; (6) manifested classic "burn-out" behavior such as exhaustion, cynicism and counter-productive behavior; and (7) manifested highly divergent career and avocational interests. (LAL)

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OFFICE OF RESEARCH AND PLANNING

FULLERTON COLLEGE

ED275355

A REPORT ON FORMER NON-GATE STUDENTS AT FULLERTON COLLEGE FULLERTON, CALIFORNIA 1985-1986

Submitted by
LeRoy J. Cordrey, PhD
Director of Research and Planning
May, 1986

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
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DEDICATED TO:

The students at Fullerton College who spent untold hours subjecting themselves to the process and tasks of providing the needed information about themselves. Our best wishes to each of them as they pursue their future endeavors.

Acknowledgements:

The project was accomplished with the aid and assistance of many, including Edna Carlson, Terry Verzar, Gina Norman, Stan Peltzer, Mark Manazer, John Schultz, Jack Kirschenbaum, Robert Kelley, Graham Booth, Gerald Owen, Fred Peters, Donald Reiman, Roy Uchizono, and many others who assisted in the encouragement of student participation in the research project.

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PREFACE:

For many years special programs dedicated to the education of our most able "bright" students have been in place in K-12 schools. Many of these students are now enrolled in 4 year college/university programs; some, by choice, attend community colleges. Others, however, did not qualify for admission to all segments of higher education in California for various reasons ranging from "poor grades in high school" to "could not afford to attend more costly educational institutions." Whatever the reasons, these former MGM-GATE students are involved in attempting to achieve their college education in community colleges. Their presence on the campuses of California Community Colleges has not been recognized as a significant phenomenon in state policy-making, in local policy-making or in tailoring the educational system of the community college to provide more appropriate experiences for such students.

Over the last few years community colleges have been faced with such overwhelming numbers of inadequately prepared students, deficient in the basic tools for learning, that attention has been focused on the task of providing programs for this overwhelming majority.

The prevailing assumption has been that the under prepared were not the product of special programs for the more able pupils in the K-12 years of education.

This research project was undertaken to focus attention on the minority of very bright students, to better understand their unique needs, and to provide a sound basis for implementation of programs designed to augment their collegiate experiences in a typical community college.

Educational Program or Need Addressed:

This project is unique in that it focuses upon a group of students which has been neglected: "burned-out, mentally gifted" (Hi P- Low Achiever) students. This project is aimed at the creation of an "alternative educational program" which will utilize "non-traditional forms, content and methods of instruction."

Expert testimony, teacher and counselor reports and research results* indicate that there is a significant number of community college students who have been identified (at some time in their K-12 educational experiences) as having high academic ability but who perform below their capacity. Moreover, a sub-group of the mentally gifted manifest behavior that strongly suggests self-defeating behavior that falls into a syndrome of "burn-out", consisting of emotional exhaustion, cynicism and counter-productive behavior. This particular sub-group of the mentally gifted population has historically been neglected, has not been studied or has not been offered programs to augment their progress and learning.

By carefully identifying this target population and isolating the deterrents to success and achievement of the MGM-GATE students, potential intervention and remedial programs could be developed to ameliorate these deterrents to full development of their potentials.

It was anticipated that these Hi P-Low Achievers students would manifest some or all of the following: 1) deficient cognitive skills, 2) inadequate study skills and time management systems, 3) have been subject to excessive counter-productive pressure from parents and teachers to obtain "good" or "high" grades from an early age, which leads to "burn-out", 4) difficulty in relating to others as a result of being prone to be outspoken, hypercritical, alienated from the influence of significant others, 5) lonely by choice or because of being inadequate in those social skills required to make friends among their "peers", 6) the ability to learn quickly; and then, become bored easily which leads to being deviate or oppositional, refusing to conform with course requirements that may be seen as "busy work", 7) have frequently triggered interactions with teachers who have treated them negatively by rejecting their ideas or teachers who have been threatened by the student's personality style, cynicism or error identifying behavior, 8) lack models for academic scholarly postures in contrast to models provided by "Pop Cultures", 9) less amounts of economic resources to assist with financing their educational endeavors, being self-supporting in many cases, 10) the tendency to avoid campus activities, 11) the tendency to avoid contact with faculty in general, but do become intensely involved with one or two with whom they can sustain a cognitive and/or affective relationship, and 12) are not recognized in their work setting as better than average people in the employment situation.

*** 32% of the Fullerton College Population are former MGM-GATE or High School "Honors" students LeRoy J. Cordrey, Statistical Report: MGM-GATE and Honors Students at Fullerton College, unpublished, October 9, 1986**

Definitions:

MGM-GATE students are individuals enrolled in academic/vocational studies at Fullerton College who participated in special programs for mentally gifted and talented students during the K-12 education years of development. (The typical "high school honors" student is not included as a part of this study.)

High Potential - Low Achievers are those individuals who achieved G.P.A's below 2.99 during their 9th - 12th years of High School. Parenthetically, these are individuals who "burned out" during their high school experiences. High Potential - High Achievers are those individuals who achieved during their 9th - 12th years of high school G.P.A's. above 3.00. Parenthetically, these are individual's who did not "burn-out" during their high school years sustaining outstanding levels of academic performance.

Subjects:

All students in the study were self-identified and confirmed by individual interviews as former MGM-GATE students during their K-12 educational experience. They were volunteer subjects who committed to completing the 8 hours of testing on the psychological instruments and the many questionnaires. (see appendix)

The intent was to obtain a broad representation of the sub-population of MGM-GATE students in a community college. Such a broad brush design generates problems of interpretation of the results, but offers an opportunity to see the whole spectrum of the sub-population.

This sub-population must by considered as only a portion of the most able college/university population.

72 self identified former MGM-GATE students present in the Fullerton College student population participated in the study. These students were first identified during a preliminary study to determine the approximate number of MGM-GATE , and high school "honors" students. 1,215 questionnaires were administered to a stratified sampling of the Fullerton College population . 226 (18.6%) of these student indicated that they were former MGM-GATE students. Each self-identified MGM student who provided a phone number on the preliminary questionnaire was called and invited to participate. Those who did participate completed the entire test battery and set of questionnaires constituting a task that required between six and eight hours to complete.

High Potential-Low Achievement and High Potential-High Achievement students were identified using their high school grade point average. Students with GPA's between 0 and 2.99 were classified as High Potential-Low Achievers; those with GPA's between 3.00 and 4.00 were classified as high potential-high achievers. The 72 students who successfully completed the entire set of questionnaires and tests in each of the two categories were distributed

unequally into 34 High Potential-Low Achievers and 36 High Potential-High Achievers. (Two subjects were not counted due to the absence of the critical G.P.A. from High School.)

An additional sample of 53 students who were not MGM-GATE's were asked to complete the K-12 questionnaire. Another sample of 224 students provided results of the MBTI.

Tests, Questionnaires, and Other Information:
Data were collected on 223 variables and are listed below:

(CPI) California Psychological Inventory
18 scales. See description of the scales in the Appendix, Pages 1 to 4.

(SAMS) Study Attitudes and Methods Survey
6 scales. See description of the scales in the Appendix, Page 5.

(MBTI) Myers-Briggs Type Indicator Form G
8 scales. See description of the scales in the Appendix, Page 6.

(SMDI) Short form of the Multiscore Depression Inventory
9 scales and global depression score. See description of the scales in the Appendix, Page 7.

(MBI) Modified Maslach Burnout Inventory
3 scales with frequency and intensity rating on each scale. See descriptions in the Appendix, Page 7.

(BDI) Beck Depression Inventory
A global score of clinical depression is obtained. See description in the Appendix, Page 7.

(CSI) Cognitive Style Questionnaire
28 scales. See description of the scales in the Appendix, Pages 8 to 13.

(K-12) Questionnaire
66 questions. See questionnaire in the Appendix, Pages 14 to 18.

Student Academic Maintenance Study
22 questions. See details on questionnaire in the Appendix, Page 19.

Academic Records:

The academic records from high school and college were evaluated by the list of criteria below:

College Transcript of Record:

1) Abortive starts (defined as semesters started but not finished)
2) total W, F, Inc, NCR grades
3) number of semesters in college
4) units attempted
5) units completed
6) wipe out semesters (the number of semesters in which a GPA of 1.99 or below was earned)
7) G.P.A. over all work at College level
8) birth date on transcript
9) number of transfer courses (100 and above)
10) Number of non-transfer courses (99 and below)
11) Social Science (Courses pursued)
12) Arts, Music Drama (Courses pursued)
13) Humanities (Courses pursued)
14) Life Science (Courses pursued)
15) Physical Science (Courses pursued)
16) Communications (Courses pursued)
17) Home Economics (Courses pursued)
18) Mathematics (Courses pursued)
19) Engineering (Courses pursued)
20) Business transfer (Courses pursued)
21) Tech/vocational (Courses pursued)
22) Business non-transfer/vocational (Courses pursued)

High School Transcript of Record:

1) High School G.P.A.
2) Number of UC A - F courses pursued:*

   A) U.S. History, Government
   B) English
   C) Mathematics
   D) Laboratory Science
   E) Foreign Language
   F) College Preparatory Elective Courses

*(For details please see the University of California High School Admissions Requirements.)

Results:

In order to present to the reader a consumable amount of information regarding the results on these 223 variables only those results that demonstrate significant differences between the High Potential-Low Achievers and High Potential-High Achievers will be presented. Results on all other variables will <u>not</u> be presented in this brief report except for the total combined group.

Demographic Characteristics included: Sex, Ethnic Origin, Marital Status, and Age.

The demographic characteristics of the subjects are shown in Table I.

TABLE I
DEMOGRAPHIC CHARACTERISTICS
OF FORMER MGM-GATE STUDENTS AT
FULLERTON COLLEGE

	Group 1 HiP Low Ach		Group 2 HiP High Ach		MGMGATE Total Combined		General FC Population	
	n	%	n	%	n	%	n	%
Sex								
Male	23	65.7	10	27.8	33	45.8		
Female	12	34.3	26	72.2	39	54.2		
Ethnic Origin								
Am. Indian	0	00.0	0	00.0	0	00.0		
Asian	1	2.9	1	2.8	2	2.8		
Black	2	5.7	0	00.0	2	2.8		
Filipino	0	00.0	1	2.8	1	1.4		
Hispanic	1	2.9	4	11.1	5	6.9		
White Caucasian	30	85.7	30	83.3	61	84.7		
Other	1	2.9	0	00.0	1	1.4		
Marital Status								
Single	33	94.3	31	86.1	64	88.9		
Married	6	00.0	3	8.3	3	4.2		
Unknown	2	5.7	2	5.6	5	6.9		
Age								
$\bar{X}$	20.3*		21.1**		21.7			
Md	19.1		20.0		19.7			
Mode	18.0		20.0		20.0			
SD	4.0		4.4		4.1			
Var	15.9		19.5		17.6			
Range	23.0		26.0		27.0			

(Two individuals were excluded from the main study.)

* One 39 year old was a participant in the second phase of development of special programs for MGM's

** One 43 year old was a participant in the very early Special Experimental programs for MGM's

GENERAL CHARACTERISTICS OF MGM-GATE STUDENTS

Marital status:

Single	95%
Married	5%

Semesters in college:

First	11%
Second	18%
Third	13%
Fourth	21%
Fifth or more	21%

Units enrolled during current semester:

1-6	7%
7-11	17%
12-14	39%
15 or more	31%

Dropped courses:

Dropped	19%
Did not drop	74%

Residence situation:

Live at home with family	79%
Live with spouse or equivalent	13%
Live with roommates	1%

Source of income:

Dependent on family	15%
Family and self	46%
Self-supporting	32%

Work hours per week:

0-10 hours	24%	21-30 hours	24%
11-15 hours	6%	31-40 hours	18%
16-20 hours	20%	Over 40 hours	3%

Amount of recreation per week:

Less than once	9%
Once a week	24%
Twice a week	33%
Three times a week	15%
More than three	19%

*Percentages do not add to 100% because of rounding errors and missing data.

Ability to meet expenses:

More than adequate	13%
Adequate/barely adequate	81%
Inadequate	5%

Mother's educational level:

Less than High School	4%
High School Graduate	26%
Some College	44%
College Graduate	26%

Father's educational level:

Less than High School	4%
Some High School	1%
High School Graduate	15%
Some College	28%
College Graduate	49%

Self reported high school GPA:

A	3%	C+	12%
B+	15%	C-	6%
B	32%	D	1%
B-	12%		

Self reported college GPA:

A	3%	C+	9%
A-	15%	C	7%
B+	15%	C-	5%
B	29%	D	7%
B-	7%		

Feelings regarding academic performance:

Dissatisfied	37%
Moderately Satisfied	49%
Very Satisfied	13%

Transportation concerns:

Often	14%
Sometimes	20%
Rarely	67%

Concerns regarding grades:

Often	41%
Sometimes	47%
Rarely	12%

Concerns regarding friends:

Often	11%
Sometimes	27%
Rarely	62%

Concerns regarding time to study:

Often	28%
Sometimes	51%
Rarely	21%

Concerns with self-motivation:

Often	45%
Sometimes	40%
Rarely	15%

Encouragement and support of significant other to attend college:

Not very supportive	8%
Moderately supportive	30%
Highly supportive	62%

Parental pressure to carry their unit load:

Yes	51%
No	59%
Not sure	5%

Parental pressure to meet their own expenses:

Yes	36%
No	59%
Not sure	5%

Parental pressure to be out on their own:

Yes	10%
No	81%
Not sure	10%

Enrolled in Certificate program:

Yes	12%
No	88%

Impact of finding full time job on course enrollment:

Try to maintain load	50%
Probably drop some	50%

Importance of finding a full time job:

Very important	51%
Somewhat important	37%
Not important	12%

Importance of graduation:

Very important	88%
Somewhat important	12%

Importance of transferring to the next level of college work upper division:

Very important	85%
Somewhat important	9%
Not important	5%

Ethnic origin:

Asian	3%	Hispanic	7%
Black	3$	White Caucasian	85%
Filipino	1%	Other	1%

Fathers are working:

Yes	93%
No	7%

Fathers' occupational level:

Unskilled	2%
Semi-skilled	8%
Technical	42%
Managerial	20%
Professional	25%
Retired	3%

Mothers are working:

Yes	77%
No	22%

Mothers' occupation level:

Unskilled	7%
Semi-skilled	30%
Technical	17%
Managerial	17%
Professional	12%
Retired	18%

Family income:

10,000	3%
20,000 to 30,000	6%
30,000 to 40,000	13%
40,000 to 50,000	13%
50,000 to 60,000	13%
60,000 or more	36%

Place of birth:

In California	79%
Outside California	17%
Foreign Country	4%

Number of schools attended:

3 schools or less	10%
4 schools	25%
5 schools	22%
6 schools	20%
7 schools	7%

Times moved:

1 time	24%	4 times	7%	7-9 times	4%
2 times	23%	5 times	9%	10-12 times	8%
3 times	13%	6 times	9%	14 times	2%

Work experience:

Yes	96%
No	4%

Number of jobs:

1 job	10%	6 jobs	4%
2 jobs	11%	7 jobs	1%
3 jobs	25%	8 jobs	6%
4 jobs	18%	9 or more	9%

Time on the job in years:

1 year or less	47%	3 years	19%
2 years	18%	4 years or more	16%

Volunteer work:

Yes	50%
No	50%

Age of student at time they were identified:

1-6	9%
7-10	46%
11+	45%

Grade level at time of identification:

1st	6%	3rd	14%	5th	11%	7th	7%
2nd	13%	4th	23%	6th	7%	8th +	16%

Entered MGM/GATE program:

Yes	78%
No	22%

Grade level at the time they experienced the greatest difficulty:

1st thru 6th	17%
7th thru 9th	37%
10th thru 12th	40%
13th +	3%

Causes for difficulty:

Uninterested in school, interested in too many things, homework was boring, transferred to new school, alcoholism and drugs, moved too frequently, too much dating, curriculum, lack of English, boy/girl friends and parties, parental divorce, athletics, not concentrating on studies, helath, social immaturity, shyness, teachers, mathematics and academics, immature peers, lack of study discipline, personal or family problems, identity crisis, and family pressure to succeed.

Contributors to their difficulties:

	Some	Greatly	Very Greatly	None
School	36%	28%	21%	15%
Peers	25%	19%	21%	35%
Family	33%	18%	19%	29%
Teachers	31%	26%	11%	32%

Rating of experiences in Elementary School, Junior High and High School:

	Elementary	Junior High	High School
Very Low	0%	3%	7%
Low	1%	10%	12%
Mediocre	26%	43%	37%
High	51%	34%	33%
Very High	18%	8%	8%

Types of learning experiences in the classroom:

	Elementary	Junior High	High School
Hands on	26%	21%	21%
Indep projects	15%	25%	25%
Teacher to group	55%	53%	53%
Rote or repetitive	28%	29%	17%
Self-directed	25%	14%	28%
Formally structured	44%	54%	53%

Ratings on competencies of significant others:

	Teacher	Father	Mother
Low	1%	7%	1%
Low Medium	9%	7%	10%
Medium	37%	15%	16%
Medium High	41%	34%	37%
High	11%	34%	34%

Encouragement of intellectual capacities by significant others:

	Teacher	Father	Mother
Low	1%	8%	4%
Low Medium	18%	10%	7%
Medium	27%	12%	10%
Medium High	34%	19%	22%
High	20%	42%	54%

Emotional support given by significant others:

	Teacher	Father	Mother
Low	20%	15%	6%
Low Medium	31%	15%	12%
Medium	30%	26%	12%
Medium High	17%	18%	16%
High	0%	26%	55%

Consistency of expectations by significant others:

	Teacher	Father	Mother
Low	4%	12%	9%
Low Medium	14%	6%	9%
Medium	46%	18%	10%
Medium High	22%	28%	37%
High	13%	37%	37%

Honesty and genuineness of significant others:

	Teacher	Father	Mother
Low	3%	9%	3%
Low Medium	19%	10%	7%
Medium	32%	12%	9%
Medium High	42%	19%	14%
High	4%	51%	67%

Valued responsibility and independence by significnat others:

	Teacher	Father	Mother
Low	1%	7%	1%
Low Medium	9%	7%	10%
Medium	37%	15%	16%
Medium High	41%	34%	37%
High	11%	34%	34%

Change view of self after MGM/GATE:

Yes	44%
No	56%

Esteem change:

Lower	8%
No change	41%
Higher	52%

Have best friend:

Yes	87%
No	13%

Friendships end on good terms:

Yes	84%
No	16%

Have career choice:

Yes	76%
No	24%

Exercised care in career choice:

Yes	65%
No	12%

Current choice was their first:

Yes	33%
No	67%

What prompted them to change from their first career choice:

Practicality and job availability , experience, better knowledge of choice, better pay, new choice more interesting, not sure of personal interests, discouraged by teacher, didn't like first choice, unfulfilling, exposure to work field, self-confidence, first choice too competitive, couldn't make up mind, and more money.

Parents have career expectation for them:

Yes	49%
No	51%

Treated differently in school:

Yes	52%
No	48%

Opinion of different treatment:

Advantage	72%
Disadvantage	28%

Sense of purpose in life:

Yes	81%
No	19%

Contribute to society:

Yes	99%
No	1%

Feel that others don't listen to them:

Yes	54%
No	46%

Ever rejected being head of a committee:

Yes	18%
No	82%

Ever flunk test just to harass the teacher:

Yes	17%
No	83%

Find it unacceptable to prepare for test before they know what will be on it:

Yes	58%
No	42%

Ever "bully" teacher:

Yes	22%
No	78%

Ever consider dropping out of high school:

Yes	22%
No	78%

Understand concepts and ability to put them in writing:

Yes	38%
No	62%

Ever "B.S." your way through an essay:

Yes	89%
No	11%

Year became bored with school:

Junior High	46%
High School	13%
Sixth grade	8%
None	32%

Tend to associate with others who can't sustain interest in school:

Yes	42%
No	58%

Object strongly to multiple choice tests:

Yes	14%
No	86%

Try to beat the system:

Yes	54%
No	46%

More intellectually stimulated at home:

Yes	37%
No	63%

Tend to get A's, B's, D's and F's all at the same time:

Yes	53%
No	47%

Number of abortive starts:

1	70%	2	30%

Total W's, F's and I's:

1	34%	6	11%
2	11%	8	7%
3	7%	10	2%
4	11%	15	2%
5	14%		

Number of semesters in college:

1 semester	33%	6 semesters	3%
2 semesters	6%	7 semesters	4%
3 semesters	19%	8 semesters	1%
4 semesters	12%	9 semesters	4%
5 semesters	17%		

Number of wipe out semesters:

1	70%
2	22%
3	4%
4	4%

GPA in college:

2.99 or below	49%
3.00 or above	51%

Birth month:

January to June	42%
July to December	58%

Units attempted in college:

1- 10 units	19%
11-19 units	20%
20-31 units	16%
32-45 units	22%
46-77 units	21%

Units completed in college:

1- 10 units	19%
11-19 units	15%
20-31 units	18%
32-45 units	19%
46-77 units	18%

Number of transfer courses pursued:

1 - 8 courses	43%
9- 17 courses	31%
18-28 courses	18%

Number of non-transfer courses pursued:

1 - 3 courses	82%
4 - 6 courses	5%
7 or more	5%

Number of Social Science courses pursued:

1 - 3 courses	68%
4 - 6 courses	10%
7 or more	10%

Number of Art courses pursued:

1 - 4 courses	87%
5 - 8 courses	7%

Number of Humanities courses pursued:

1 - 3 courses	75%
4 - 6 courses	10%
7 or more	4%

Number of Life Science courses pursued:

1 course	48%
2 courses	44%
3 courses	4%
4 courses	4%

Number of Physical Science courses pursued:

1 course	72%
2 courses	23%
3 courses	5%

Number of Communications courses pursued:

1 course	90%
2 courses	10%

Number of Home Economics courses pursued:

1 course	45%
2 courses	18%
3 courses	9%
6 courses	9%
7 courses	9%
12 courses	9%

Number of Mathematics courses pursued:

1 course	54%
2 courses	23%
3 courses	15%
4 courses	5%
7 courses	3%

Number of Engineering courses pursued:

1 course	1%

Number of Business transfer courses pursued:

1 course	62%
2 courses	19%
3 courses	10%
4 courses	9%

Number of Business non-transfer courses pursued:

1 course	50%
2 courses	25%
3 courses	25%

Number of Technical Education courses pursued:

1 course	37%
2 courses	25%
3 courses	12%
4 courses	12%
7 courses	12%

HIGH SCHOOL A-F REQUIREMENTS COMPLETED

A: Number of History and/or Government courses taken in High School:

1 course	11%
2 courses	76%
3 courses	10%
4 courses	2%
5 courses	2%

B: Number of English courses taken in High School:

2 courses	9%
3 courses	22%
4 courses	69%

C: Number of Mathematics courses taken in High School:

1 course	8%
2 courses	27%
3 courses	34%
4 courses	27%
5 curses	3%

D: Number of Laboratory Science courses taken in High School:

1 course	34%
2 courses	50%
3 courses	14%
5 courses	2%

E: Number of Foreign Language courses taken in High School:

1 course	26%
2 courses	44%
3 courses	17%
4 courses	12%

F: Number of College Preparatory Elective courses taken in High School:

1 course	30%	5 courses	5%
2 courses	34%	7 courses	2%
3 courses	16%	8 courses	2%
4 courses	9%		

Personality CPI:

Differences in personality as measured on the CPI were shown on the following CPI scales e.g. Socialization, Self-control, Good Impression, Flexibility, for High Potential-Low Achievers and High Potential-High Achievers groups. (See Figure 1.) The combined group scored high on the following scales: Social Presence, Self-Acceptance, and Flexibility, and low on the following scales e.g. Sense of Well Being, Responsibility, Socialization, and Self-Control.

California Personality Inventory Profile of the MGM-GATE Student

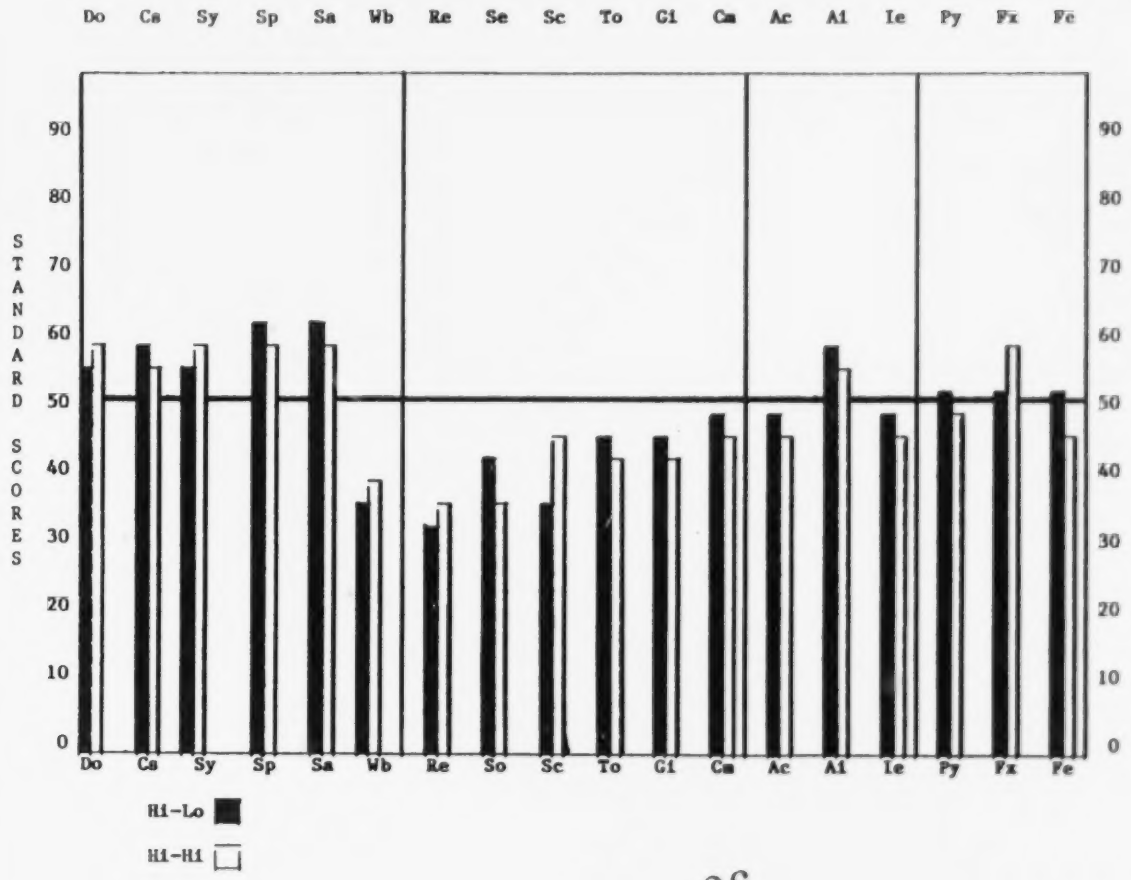
A personality profile for the total MGM-GATE sample would read as follows:

Moderately high poise, spontaneity, and self-confidence in personal and social interaction tending to be clever, enthusiastic, imaginative, quick, spontaneous, active and vigorous; having an expressive, ebullient nature. A high sense of personal worth, self-acceptance and capacity for independent thinking and action; tending to be intelligent, outspoken, cool, versatile, witty, aggressive, and self-centered; possessing self-confidence and self-assurance. A low sense of well being tending to maximize their worries and complaints, and burdened with self-doubt and some disillusionment being apt to appear unambitious, leisurely, cautious, apathetic, and conventional; self defensive and apologetic constricted in thought and action. Tend to describe themselves as unconscientious, irresponsible and undependable in disposition and temperament, being somewhat awkward, changeable, immature, moody, lazy and disbelieving; influenced by personal bias, spite and dogmatism; under controlled and impulsive in behavior.

They are not free of problems in the degree and adequacy of self-regulation and self-control and are prone to be impulsive and self-centered; most apt to be shrewd, excitable, irritable, uninhibited, aggressive and assertive; over emphasizing personal pleasure and self gain. They tend to show a degree of flexibility and adaptability in thinking and social behavior; tend to be insightful, informal, adventurous, humorous, rebellious, idealistic, assertive and egotistic, sarcastic and cynical; concerned with personal pleasure and diversion.

FIGURE 1

CALIFORNIA PERSONALITY INVENTORY PROFILES
OF HI P-LOW ACHIEVERS AND HI P-HI ACHIEVERS



Personality Profile of High Potential Low Achievers

High Potential-Low Achievers in contrast to High Potential-High Achievers tended to describe themselves in such manner as to indicate higher levels of the following: defensiveness, demanding, opinionated, resentful, headstrong, rebellious, and undependable; guileful and deceitful; given to excess, ostentation and exhibition in behavior; inhibited, shrewd, wary and resentful; cool, and distant in their relationships; self-centered and little concerned with the needs and wants of others; impatient, changeable, complicated, nervous, restless and confused, inattentive and forgetful; having internal conflicts. Insightful, informal, adventurous, humorous, rebellious, idealistic, assertive, and egotistic, sarcastic and cynical; concerned with personal pleasure and diversion.

Personality Profile of High Potential High Achievers

High Potential-High achievers in contrast to High Potential-Low achievers tended to describe themselves in such a manner as to suggest less defensiveness, resentfullness, rebelliousness; more straightforward, uninhibited, honest, industrious, sincere and steady; as being conscientious and responsible, self denying and conforming; as prone to wish to make a good impression; with good impulse control; cordial and prone to exercise reasonable self interest and interest in others.

MBTI

The personality as reported on the MBTI is far more complex. These data can best be presented in 3 ways.

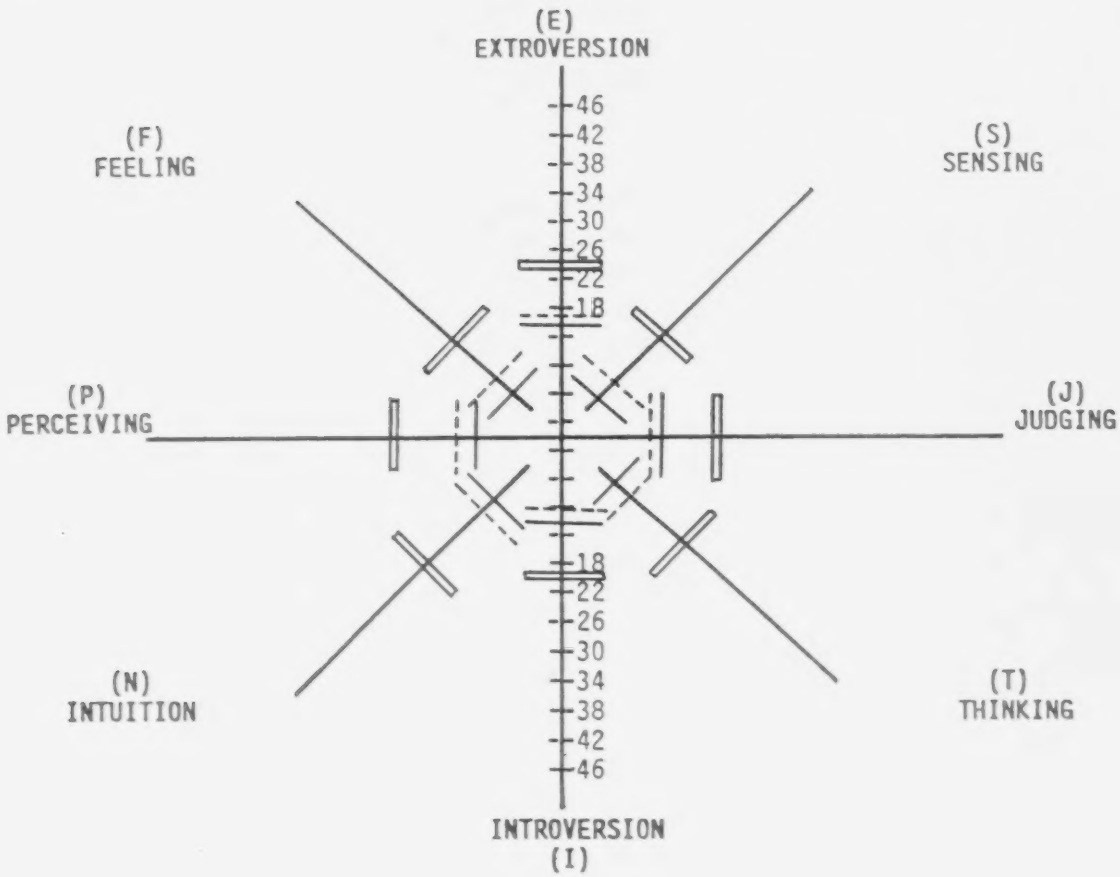
First, how the two groups and the general college population are located on the dimensions of personality. The results presented in Figure 2 suggest that MGM-GATE students are more balanced on the 4 dimensions of personality being located close to the center of the dimensions at '0' than the general population. It is reasonable to assume that more personality "integration", in the classic Jungian definition, is present in the MGM-GATE population, than is manifested by the general student population at Fullerton College.

Second, the frequencies of occurrence of the major temperament styles of which there are eight shown in Table II.

Third, the frequencies of occurrence of the 16 major temperament styles shown in Table III.

FIGURE 2

MBTI Personality Temperament Styles
of MGM-GATE High Potential-Low Achievers,
High Potential-High Achievers and Fullerton
College General Population Students



MGM-GATE

---- Hi P-Low Ach

——— Hi P-Hi Ach

═══ General Population at Fullerton College

TABLE II
FREQUENCY OF THE 8 MAJOR
PERSONALITY TEMPERAMENT STYLES

Styles *	Hi-P Low Ach's n	%	Hi-P Hi Ach's n	%	Total n	%
ET	2	2.9	5	7.1	7	10.0
IT	2	2.9	2	2.9	4	5.7
EF	5	7.1	7	10.0	12	17.1
IF	7	10.0	6	8.6	13	18.6
ES	1	1.4	1	1.4	2	2.9
IS	4	5.7	2	2.9	6	8.6
EN	11	15.7	10	14.3	21	30.0
IN	2	2.9	3	4.3	5	7.1

* ET Extroverted-Thinking
IT Introverted-Thinking
EF Extroverted-Feeling
IF Introverted Feeling
ES Extroverted-Sensing
IS Introverted-Sensing
EN Extroverted-Intuitive
IN Introverted-Intuitive

TABLE III
FREQUENCY OF THE 16 MAJOR
PERSONALITY TEMPERAMENT STYLES OF MGM-GATE
HI P-LOW ACH's, HI P-HI ACH'S AND THE GENERAL POPULATION OF STUDENTS
AT FULLERTON COLLEGE

	Hi-P Low Ach's		Hi-P Hi Ach's		Total MGM/GATE		FC General Population	
	n	%	n	%	n	%	n	%
ISTJ	2	2.9	1	1.4	3	4.3	17	7.6
ISFJ	2	2.9	1	1.4	3	4.3	19	8.5
INFJ	1	1.4	2	2.9	3	4.3	7	3.1
INTJ	1	1.4	1	1.4	2	2.9	5	2.2
ISFP	0	0.0	2	2.9	2	2.9	9	4.0
INFP	7	10.0	4	5.7	11	15.7	14	6.3
INTP	2	2.9	2	2.9	4	5.7	8	3.6
ISTP	0	0.0	0	0.0	0	0.0	4	1.8
ESFJ	1	1.4	1	1.4	2	2.9	19	8.5
ESTP	1	1.4	1	1.4	2	2.9	8	3.6
ESFP	2	2.9	7	10.0	9	12.9	13	5.8
ENTP	9	12.9	3	4.3	12	17.1	15	6.7
ESTJ	2	2.9	1	1.4	3	4.3	15	6.7
ENFJ	4	5.7	6	8.6	10	14.3	11	4.9
ENTJ	0	0.0	4	5.7	4	5.7	12	12.1
ENFP	0	0.0	0	0.0	0	0.0	48	21.4
TOTAL	34	48.6	36	51.4	70	100.0	224	100.0

TABLE IV

T-TEST FOR HI P-LOW Achievers (GROUP 1)
AND HI P-HIGH Achievers (GROUP 2) ON THE CPI,
SAMS, MBTI, MDI, MBI, BECK DEPRESSION INVENTORY, CSQ, AND UNITS
ATTEMPTED, UNITS COMPLETED, COOP EXPRESSION,
DRP READING, ARITHMETIC AND ALGEBRA

(Consists of 12 pages)

FILE MGMGATE1 (CREATION DATE = 05/08/86)

- T - T E S T -

GROUP 1 - MGMT EQ 1.
GROUP 2 - MGMT EQ 2.

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE T VALUE	POOLED VARIANCE ESTIMATE DEGREES OF FREEDOM	POOLED VARIANCE ESTIMATE 2-TAIL PROB.	SEPARATE VARIANCE ESTIMATE T VALUE	SEPARATE VARIANCE ESTIMATE DEGREES OF FREEDOM	SEPARATE VARIANCE ESTIMATE 2-TAIL PROB.
VAR1 DOMINANCE												
GROUP 1	34	53.3824	11.703	2.007	1.20	.801	-.27	68	.790	-.27	67.93	.790
GROUP 2	36	54.1667	12.819	2.136								
VAR2 CAPACITY FOR STATUS												
GROUP 1	34	52.2941	13.539	2.322	2.08	.036	-.39	68	.694	-.39	58.45	.697
GROUP 2	36	53.3889	9.397	1.566								
VAR3 SOCIABILITY												
GROUP 1	34	53.8529	11.722	2.010	1.43	.298	.14	68	.891	.14	64.43	.892
GROUP 2	36	53.5000	9.788	1.631								
VAR4 SOC PRESENCE												
GROUP 1	34	59.9706	12.342	2.117	1.11	.751	.93	68	.357	.93	67.16	.358
GROUP 2	36	57.3056	11.691	1.948								
VAR5 SELF ACCEPTANCE												
GROUP 1	34	60.8824	12.945	2.220	2.42	.011	.26	68	.799	.25	55.78	.802
GROUP 2	36	60.2222	8.322	1.387								
VAR6 WELL BEING												
GROUP 1	34	39.3824	14.879	2.552	1.20	.597	.12	68	.901	.12	67.92	.901
GROUP 2	36	38.9167	16.314	2.719								
VAR7 RESPONSIBILITY												
GROUP 1	34	38.3824	12.000	2.058	1.03	.929	-.98	68	.341	-.98	67.84	.342
GROUP 2	36	39.1111	11.824	1.971								

FILE MGMGATE1 (CREATION DATE = 05/08/88)

T - T E S T

GROUP 1 - MGMT EQ 1.
GROUP 2 - MGMT EQ 2.

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	F 2-TAIL PROB.	POOLED VARIANCE ESTIMATE T VALUE	POOLED VARIANCE ESTIMATE DEGREES OF FREEDOM	POOLED VARIANCE ESTIMATE 2-TAIL PROB.	SEPARATE VARIANCE ESTIMATE T VALUE	SEPARATE VARIANCE ESTIMATE DEGREES OF FREEDOM	SEPARATE VARIANCE ESTIMATE 2-TAIL PROB.
VAR8 SOCIALIZATION												
GROUP 1	34	37.9118	10.760	1.845	1.31	.433	-1.81	68	.074	-1.82	67.59	.073
GROUP 2	36	42.9444	12.333	2.058								
VAR9 SELF CONTROL												
GROUP 1	34	35.5294	11.955	2.050	1.13	.714	-2.40	68	.019	-2.39	67.03	.020
GROUP 2	36	42.1667	11.229	1.871								
VAR10 TOLERANCE												
GROUP 1	34	43.4706	11.600	1.989	1.16	.663	-.82	68	.414	-.82	66.83	.415
GROUP 2	36	45.6667	10.765	1.794								
VAR11 GOOD IMPRESSION												
GROUP 1	34	38.5294	9.633	1.652	1.43	.302	-2.32	68	.023	-2.33	67.02	.023
GROUP 2	36	44.4444	11.532	1.922								
VAR12 COMMUNALITY												
GROUP 1	34	46.2059	11.478	1.968	1.71	.120	-.44	68	.661	-.44	61.72	.663
GROUP 2	36	47.2778	8.769	1.461								
VAR13 ACHIEVE VS CONFORM												
GROUP 1	34	44.4118	13.159	2.257	1.29	.453	-.66	68	.512	-.66	65.73	.514
GROUP 2	36	46.3611	11.566	1.928								
VAR14 ACHIEVE VS INDEP												
GROUP 1	34	53.4706	11.830	2.029	1.67	.139	-.19	68	.851	-.19	62.17	.853
GROUP 2	36	53.9444	9.162	1.527								

FILE MGMGATE1 (CREATION DATE = 05/08/88)

T - T E S T

GROUP 1 - MGMT EQ 1.
GROUP 2 - MGMT EQ 2.

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	SEPARATE VARIANCE ESTIMATE T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
VAR15 INTELL EFFICIENCY												
GROUP 1	34	46.6471	12.451	2.135	1.03	.925	-1.09	68	.280	-1.09	67.88	.280
GROUP 2	36	49.9167	12.681	2.110								
VAR16 PSYCH MINDEDNESS												
GROUP 1	34	49.7059	12.549	2.152	1.31	.431	-.79	68	.434	-.78	65.58	.436
GROUP 2	36	51.9167	10.958	1.826								
VAR17 FLEXIBILITY												
GROUP 1	34	59.3529	13.593	2.331	1.68	.132	1.67	68	.100	1.66	62.02	.103
GROUP 2	36	54.5278	10.479	1.748								
VAR18 FEMININITY												
GROUP 1	34	48.9706	10.047	1.723	1.30	.443	-1.63	68	.108	-1.62	65.66	.110
GROUP 2	36	50.6389	8.803	1.467								
VAR19 ACADEMIC INTEREST												
GROUP 1	34	55.4706	9.814	1.683	1.11	.781	-.90	68	.371	-.90	67.19	.372
GROUP 2	36	57.5278	9.318	1.553								
VAR20 ACAD DR CONFORM												
GROUP 1	34	51.0882	11.137	1.910	1.41	.321	-2.10	68	.039	-2.09	64.68	.040
GROUP 2	36	56.2500	9.385	1.564								
VAR21 STUDY METHODS												
GROUP 1	34	54.2647	8.629	1.514	1.45	.287	-.94	68	.349	-.95	66.93	.347
GROUP 2	36	56.4722	10.627	1.771								

FILE MGMGATE1 (CREATION DATE = 05/09/86)

T - T E S T

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GROUP 2 - MGMT EQ 2.

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE T VALUE	POOLED VARIANCE ESTIMATE DEGREES OF FREEDOM	POOLED VARIANCE ESTIMATE 2-TAIL PROB.	SEPARATE VARIANCE ESTIMATE T VALUE	SEPARATE VARIANCE ESTIMATE DEGREES OF FREEDOM	SEPARATE VARIANCE ESTIMATE 2-TAIL PROB.
VAR22 STUDY ANXIETY												
GROUP 1	34	53.4412	9.313	1.597	1.18	.630	.39	68	.698	.39	67.95	.698
GROUP 2	36	52.5278	10.129	1.688								
VAR23 MANIPULATION												
GROUP 1	34	45.4118	11.306	1.939	1.13	.714	-.98	68	.332	-.98	67.03	.333
GROUP 2	36	47.9722	10.619	1.770								
VAR24 ALIENATION TO AUTHORITY												
GROUP 1	34	47.4118	10.643	1.825	1.92	.060	-.27	68	.791	-.26	59.80	.793
GROUP 2	36	48.0000	7.679	1.280								
VAR25 EXTRO VERTED												
GROUP 1	32	14.7187	6.953	1.229	1.15	.694	.42	66	.673	.42	63.77	.675
GROUP 2	36	14.0278	6.496	1.083								
VAR26 INTROVERTED												
GROUP 1	31	12.0000	7.095	1.274	1.02	.960	-.24	65	.812	-.24	63.72	.812
GROUP 2	36	12.4167	7.169	1.195								
VAR27 SENSING												
GROUP 1	30	8.4667	6.174	1.127	1.24	.557	1.13	60	.262	1.13	58.27	.264
GROUP 2	32	6.7812	5.546	.980								
VAR28 INTUITIVE												
GROUP 1	32	15.5937	6.169	1.091	1.21	.575	-.81	66	.421	-.81	63.06	.423
GROUP 2	36	16.7500	5.598	.933								

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FILE MGMGATE1 (CREATION DATE = 05/09/86)

- T - T E S T -

GROUP 1 - MGMT EQ 1.
GROUP 2 - MGMT EQ 2.

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	SEPARATE VARIANCE ESTIMATE T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
VAR29 THINKING												
GROUP 1	32	11.5937	6.767	1.196	1.27	.512	1.21	64	.230	1.22	63.80	.229
GROUP 2	34	9.4412	7.613	1.306								
VAR30 FEELING												
GROUP 1	32	9.5937	4.885	.864	1.18	.685	-1.20	65	.234	-1.20	64.98	.233
GROUP 2	35	11.0857	5.255	.888								
VAR31 JUDGING												
GROUP 1	32	11.6250	7.815	1.382	1.58	.212	-1.20	64	.236	-1.19	59.39	.239
GROUP 2	34	13.7059	8.260	1.074								
VAR32 PERCEIVING												
GROUP 1	31	15.8452	7.731	1.389	1.10	.787	.74	65	.462	.74	62.55	.464
GROUP 2	36	14.2778	7.382	1.230								
VAR34 COGNITIVE DIFFICULTY												
GROUP 1	33	47.3939	10.371	1.805	1.32	.422	-.95	67	.348	-.94	63.76	.349
GROUP 2	36	49.6111	9.025	1.504								
VAR35 ENERGY LEVEL												
GROUP 1	33	51.9091	12.110	2.108	1.01	.971	-.07	67	.945	-.07	66.58	.945
GROUP 2	36	52.1111	12.198	2.033								
VAR36 SELF ESTEEM												
GROUP 1	33	49.4848	10.047	1.749	1.21	.586	-.14	67	.892	-.14	67.00	.891
GROUP 2	36	49.8333	11.060	1.843								

FILE MGMGATE1 (CREATION DATE = 05/09/86)

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VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	SEPARATE VARIANCE ESTIMATE T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
VAR37 GUILT												
GROUP 1	33	48.3939	10.130	1.763	1.03	.928	.59	67	.559	.59	66.30	.560
GROUP 2	36	46.9722	9.981	1.664								
VAR38 SOCIAL INTROVERSION												
GROUP 1	33	48.0000	8.881	1.546	1.35	.389	-1.57	67	.120	-1.58	66.74	.118
GROUP 2	36	51.6667	10.334	1.722								
VAR39 PESSIMISM												
GROUP 1	33	52.7273	12.795	2.227	1.30	.446	-.08	67	.940	-.07	63.95	.941
GROUP 2	36	52.9444	11.215	1.869								
VAR40 IRRITABILITY												
GROUP 1	33	50.9091	10.713	1.865	1.29	.483	-.42	67	.673	-.43	66.89	.672
GROUP 2	36	52.0833	12.190	2.032								
VAR41 SAD MOOD												
GROUP 1	33	59.5758	8.068	1.404	1.41	.332	.29	67	.769	.30	66.55	.767
GROUP 2	36	58.9444	9.568	1.595								
VAR42 INSTR HELPLESSNESS												
GROUP 1	33	51.8182	12.800	2.228	1.00	.988	-.32	67	.750	-.32	66.46	.750
GROUP 2	36	52.8056	12.777	2.129								
VAR43 TOTAL SMI												
GROUP 1	33	50.9697	11.823	2.058	1.38	.364	-.04	67	.971	-.04	66.66	.971
GROUP 2	36	51.0833	13.870	2.312								

FILE MGMGATE1 (CREATION DATE = 05/09/88)

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VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	SEPARATE VARIANCE ESTIMATE T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
VAR44 EMOT EX FREQ												
GROUP 1	35	21.0288	8.501	1.437	1.69	.127	-.65	69	.517	-.65	65.53	.516
GROUP 2	38	22.5556	11.067	1.845								
VAR45 EMOT EX INTEN												
GROUP 1	35	28.5143	10.121	1.711	1.64	.152	-.34	69	.738	-.34	65.98	.737
GROUP 2	36	29.4444	12.960	2.160								
VAR46 DEPERS FREQ												
GROUP 1	32	9.0937	5.997	1.060	1.33	.427	.15	63	.878	.15	61.18	.878
GROUP 2	33	8.8788	5.201	.905								
VAR47 DEPERS INTEN												
GROUP 1	32	12.1250	7.183	1.270	1.32	.433	.13	63	.897	.13	61.22	.898
GROUP 2	33	11.9091	6.242	1.087								
VAR48 PERS ACCOMP FREQ												
GROUP 1	35	33.4000	6.929	1.171	1.08	.817	.11	69	.916	.11	68.99	.916
GROUP 2	36	33.2222	7.212	1.202								
VAR49 PERS ACCOMP INTEN												
GROUP 1	35	40.4857	6.758	1.142	1.14	.692	1.51	69	.135	1.51	68.37	.135
GROUP 2	36	38.1389	6.316	1.053								
VAR50 DEPRESSION LEVEL												
GROUP 1	32	9.8750	9.631	1.703	1.12	.747	-.39	63	.698	-.39	62.51	.698
GROUP 2	33	10.7879	9.092	1.583								

FILE MGMGATE1 (CREATION DATE = 05/09/86)

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VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE T VALUE	POOLED VARIANCE ESTIMATE DEGREES OF FREEDOM	POOLED VARIANCE ESTIMATE 2-TAIL PROB.	SEPARATE VARIANCE ESTIMATE T VALUE	SEPARATE VARIANCE ESTIMATE DEGREES OF FREEDOM	SEPARATE VARIANCE ESTIMATE 2-TAIL PROB.
VAR182 TAL1												
GROUP 1	35	28.2286	4.741	.801	1.32	.419	.33	68	.744	.33	66.71	.744
GROUP 2	35	27.8286	5.453	.922								
VAR183 TAQ2												
GROUP 1	35	22.9429	4.814	.814	1.54	.216	.29	68	.775	.29	65.09	.775
GROUP 2	35	22.5714	5.987	1.009								
VAR184 TVL3												
GROUP 1	35	29.5714	4.736	.801	1.58	.188	1.71	68	.092	1.71	64.71	.092
GROUP 2	35	27.3714	5.956	1.007								
VAR185 TVQ4												
GROUP 1	35	33.5143	3.501	.592	1.53	.220	.42	68	.672	.42	65.14	.672
GROUP 2	35	33.1143	4.330	.732								
VAR186 QA5												
GROUP 1	35	34.3143	3.909	.661	1.13	.718	.82	68	.415	.82	67.74	.415
GROUP 2	35	33.5714	3.873	.621								
VAR187 QO6												
GROUP 1	35	29.4857	5.982	1.008	1.17	.653	.71	68	.482	.71	67.59	.482
GROUP 2	35	28.5143	5.517	.932								
VAR188 QS7												
GROUP 1	35	29.0000	4.570	.772	1.49	.251	-1.97	68	.052	-1.97	65.48	.053
GROUP 2	35	30.9714	3.745	.633								

FILE MGMGATE1 (CREATION DATE = 05/09/86)

T - T E S T

GROUP 1 - MGMT EQ 1.
GROUP 2 - MGMT EQ 2.

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE T VALUE	POOLED VARIANCE ESTIMATE DEGREES OF FREEDOM	POOLED VARIANCE ESTIMATE 2-TAIL PROB.	SEPARATE VARIANCE ESTIMATE T VALUE	SEPARATE VARIANCE ESTIMATE DEGREES OF FREEDOM	SEPARATE VARIANCE ESTIMATE 2-TAIL PROB.
VAR169 QT8												
GROUP 1	35	38.2000	5.422	.917	3.67	.000	-1.02	68	.310	-1.02	51.27	.311
GROUP 2	35	37.2571	2.832	.479								
VAR170 QV9												
GROUP 1	35	30.6000	3.790	.641	1.03	.940	-1.62	68	.110	-1.62	67.99	.110
GROUP 2	35	32.0571	3.741	.632								
VAR171 QP10												
GROUP 1	35	32.8571	4.735	.800	2.11	.033	2.29	68	.025	2.29	60.34	.026
GROUP 2	35	29.6286	6.873	1.162								
VAR172 QCEM11												
GROUP 1	35	32.3714	4.486	.758	1.48	.280	-.07	68	.943	-.07	65.57	.943
GROUP 2	35	32.4571	5.452	.922								
VAR173 QCES12												
GROUP 1	35	33.1143	4.757	.804	1.08	.831	.08	68	.939	.08	67.91	.939
GROUP 2	35	33.0286	4.586	.775								
VAR174 QCET13												
GROUP 1	35	32.8000	5.115	.865	1.49	.251	-.28	68	.779	-.28	65.47	.779
GROUP 2	35	33.1143	4.192	.709								
VAR175 QCH14												
GROUP 1	35	24.1429	6.288	1.063	2.38	.013	.16	68	.875	.16	58.28	.875
GROUP 2	35	23.9429	4.072	.688								

FILE MGMGATE1 (CREATION DATE = 05/09/86)

T - T E S T

GROUP 1 - MGMT EQ 1.
GROUP 2 - MGMT EQ 2.

VARIABLE		NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	F 2-TAIL PROB.	POOLED VARIANCE ESTIMATE T VALUE	POOLED VARIANCE ESTIMATE DEGREES OF FREEDOM	POOLED VARIANCE ESTIMATE 2-TAIL PROB.	SEPARATE VARIANCE ESTIMATE T VALUE	SEPARATE VARIANCE ESTIMATE DEGREES OF FREEDOM	SEPARATE VARIANCE ESTIMATE 2-TAIL PROB.
MGME	CCNO												
	GROUP 1	35	411.2857	189.164	31.974	1.43	.295	1.50	69	.139	1.50	67.48	.138
	GROUP 2	36	336.9444	228.550	37.758								
VAR176	QCK15												
	GROUP 1	35	26.2286	6.362	1.075	1.09	.807	-1.69	68	.096	-1.69	67.88	.096
	GROUP 2	35	28.7429	8.099	1.031								
VAR177	QCKH16												
	GROUP 1	35	27.4000	5.494	.929	1.59	.182	.59	68	.555	.59	64.66	.555
	GROUP 2	35	26.5143	6.926	1.171								
VAR178	QCP17												
	GROUP 1	35	35.0857	6.555	1.108	1.44	.292	.99	68	.325	.99	65.85	.325
	GROUP 2	35	33.6571	5.461	.923								
VAR179	QCS18												
	GROUP 1	35	34.2286	4.647	.785	1.97	.053	.04	68	.968	.04	61.48	.968
	GROUP 2	35	34.1714	6.515	1.101								
VAR180	QCT19												
	GROUP 1	35	29.8571	6.835	1.155	1.39	.346	.83	68	.410	.83	66.27	.410
	GROUP 2	35	28.6000	5.807	.982								
VAR181	QCTM20												
	GROUP 1	35	31.2000	5.764	.974	1.36	.370	.42	68	.676	.42	66.43	.676
	GROUP 2	35	30.5714	6.731	1.138								

FILE MGMGATE1 (CREATION DATE = 05/09/88)

- T - T E S T -

GROUP 1 - MGMT EQ 1.
GROUP 2 - MGMT EQ 2.

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE T VALUE	POOLED VARIANCE ESTIMATE DEGREES OF FREEDOM	POOLED VARIANCE ESTIMATE 2-TAIL PROB.	SEPARATE VARIANCE ESTIMATE T VALUE	SEPARATE VARIANCE ESTIMATE DEGREES OF FREEDOM	SEPARATE VARIANCE ESTIMATE 2-TAIL PROB.
VAR182 A21												
GROUP 1	35	25.0000	5.745	.971	1.46	.278	.86	68	.391	.86	65.73	.391
GROUP 2	35	23.6857	6.931	1.172								
VAR183 F22												
GROUP 1	35	20.9143	5.863	.991	1.54	.211	-1.63	68	.108	-1.63	65.04	.109
GROUP 2	35	23.4857	7.282	1.231								
VAR184 I												
GROUP 1	35	29.6571	4.338	.733	1.35	.392	.13	68	.899	.13	66.56	.899
GROUP 2	35	29.5143	5.031	.850								
VAR185 M												
GROUP 1	35	29.5429	5.612	.949	1.15	.692	1.03	68	.304	1.03	67.68	.304
GROUP 2	35	28.2000	5.240	.886								
VAR186 D25												
GROUP 1	35	27.7143	5.211	.881	1.09	.813	.19	68	.852	.19	67.89	.852
GROUP 2	35	27.4857	5.002	.846								
VAR187 R26												
GROUP 1	35	29.2571	6.237	1.054	1.14	.703	.32	68	.753	.32	67.71	.753
GROUP 2	35	28.8000	5.840	.987								
VAR188 L27												
GROUP 1	35	28.4571	4.822	.815	1.08	.833	-.34	68	.734	-.34	67.91	.734
GROUP 2	35	28.8571	5.001	.845								

FILE MGMGATE1 (CREATION DATE = 05/09/86)

T - T E S T

GROUP 1 - MGMT EQ 1.
GROUP 2 - MGMT EQ 2.

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	F VALUE	2-TAIL PROB.	POOLED VARIANCE ESTIMATE T VALUE	POOLED VARIANCE ESTIMATE DEGREES OF FREEDOM	POOLED VARIANCE ESTIMATE 2-TAIL PROB.	SEPARATE VARIANCE ESTIMATE T VALUE	SEPARATE VARIANCE ESTIMATE DEGREES OF FREEDOM	SEPARATE VARIANCE ESTIMATE 2-TAIL PROB.
VAR189 K28												
GROUP 1	35	28.0857	7.793	1.317	1.57	.193	-.53	68	.601	-.53	64.81	.601
GROUP 2	35	28.9714	6.219	1.051								
VAR193 UNITS ATTEMPT C												
GROUP 1	32	25.1875	16.295	2.880	1.62	.179	-2.13	64	.037	-2.15	62.05	.036
GROUP 2	34	35.0294	20.758	3.560								
VAR194 UNITS COMPLETED C												
GROUP 1	32	24.6562	15.979	2.825	1.79	.106	-2.23	64	.029	-2.25	60.93	.028
GROUP 2	34	35.0882	21.396	3.669								
VAR219 EXPRESS												
GROUP 1	18	43.7778	8.164	1.924	2.17	.112	1.27	37	.212	1.31	35.29	.200
GROUP 2	21	39.5238	12.023	2.624								
VAR220 READING T DRP SCORE												
GROUP 1	18	71.3333	8.097	1.437	2.35	.080	.78	37	.442	.80	34.72	.428
GROUP 2	21	69.3333	9.345	2.039								
VAR221 ARITHMETIC SCORE												
GROUP 1	18	21.3333	2.567	.605	2.76	.041	.72	36	.476	.74	31.66	.466
GROUP 2	20	20.5000	4.281	.953								
VAR222 ALGEBRA T SCORE												
GROUP 1	18	13.8889	5.880	1.386	1.81	.223	.62	35	.541	.61	31.38	.545
GROUP 2	19	12.8421	4.375	1.004								

Study Attitudes and Methods (SAMS)

Hi P-Low Achievers and Hi P-Hi Achievers results are shown in Figure 3.

Both groups have high academic interest and a genuine love of learning. They like writing papers, reading, solving challenging problems and researching in the library; show an above average amount of systematic, organized, methodical and well-planned work habits, well developed study skills; an average amount of study anxiety and tend to be fearful that their level of performance is not high enough to meet the expectation; have few problems with the acceptance of campus rules and regulations and fulfilling the requirements involved in assignments and examinations.

Differences between Hi P-Low Achievers and Hi P-Hi Achievers

Hi P-Low Achievers are exceeded by the Hi P-Hi Achievers in the determination to succeed in academic work with a stronger desire to achieve and put forth more effort to do exactly what is expected of them by their teachers. Hi P-Low Achievers tend to be more manipulative, seek special consideration, to coerce, force, and to "con" others into granting special privileges or favors.

Cognitive Styles Questionnaire

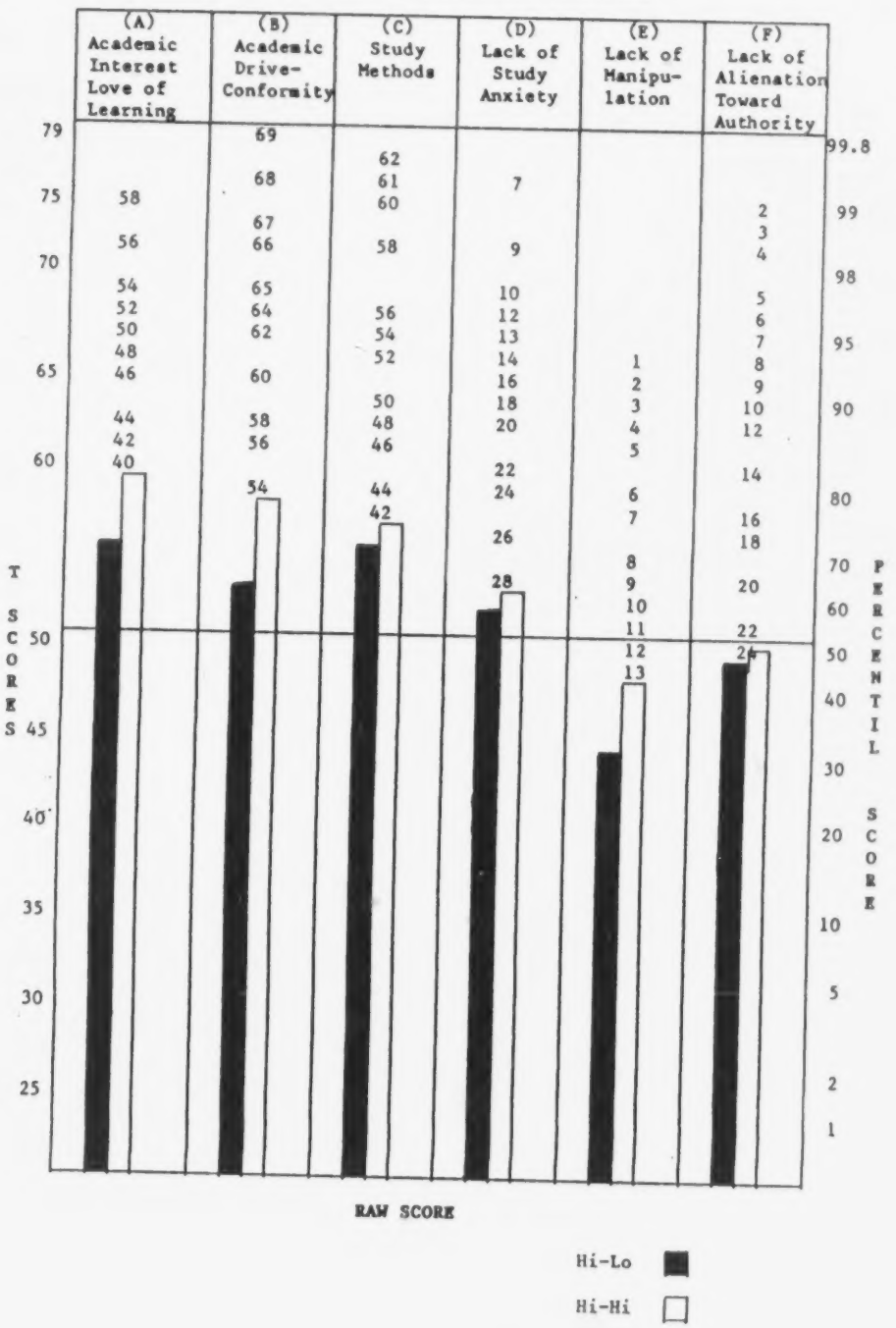
The results of the Cognitive Styles Questionnaire for the Hi P-Low Achievers (Group 1) and Hi P-High Achievers (Group 2) revealed significant differences on 5 of the 28 scales. These scales are Language input by sight, Input by taste, Coordination of thoughts or actions, Use of non-verbal language, and Working under direction. Using a "t-test" to test the significance of these differences and setting P>.10, the following results occurred:

The Hi P-Low Achievers score slightly higher than do the Hi P-Hi Achievers on "3. Language input by sight - one enjoys getting verbal meaning from information by reading. (see Var 163 in Table IV)

Hi P-High Achievers score slightly higher than Hi P-Low Achievers on "7. Input by taste - Many "taste majors" carry gum, candy, or cigarettes because they learn better with something to chew or drink." than do Hi P-Low Achievers (see var 168 in Table IV)
Hi P-Low Achievers score slightly higher than do the Hi P-High Achievers on "10. Coordination of thoughts or actions. This is sometimes called the "sixth sense". It is important to see how the parts of a process fit together." (see var 171 in Table IV)
Hi P-High Achievers score higher that Hi P-Low Achievers on "15 Use of non-verbal language - Lots of information is given by facial expressions and hand movements instead of words. If one is a "major" on this scale, one is tuned to this way of talking. This is sensitivity to and well developed use of body language." (See var 176 in Table IV)

Hi P-High Achievers score higher than Hi P-Low Achievers on "22. Working under direction - this is a preference for knowing exactly what is happening and exactly what is to be done." (See var 183 in Table IV)

FIGURE 3
STUDY ATTITUDES AND METHODS SURVEY PROFILE
OF MGH/GATE HIGH POTENTIAL LOW ACHIEVERS AND
HIGH POTENTIAL HIGH ACHIEVERS



College Units Attempted and Completed

The number of units attempted and the number of units completed are different for the High Potential-Low Achievers (Group 1) and High Potential-High Achievers (Group 2). The Hi P-High Achievers attempted and completed 10 more college units than did the High Potential-Low Achievers. (See var193 and var194 in Table IV)

Presence of Depression SMDI and BDI

The results of the two assessments of Depression using the SMDI and the BDI are shown in Table IV. The associated variables for the SMDI are as follows:

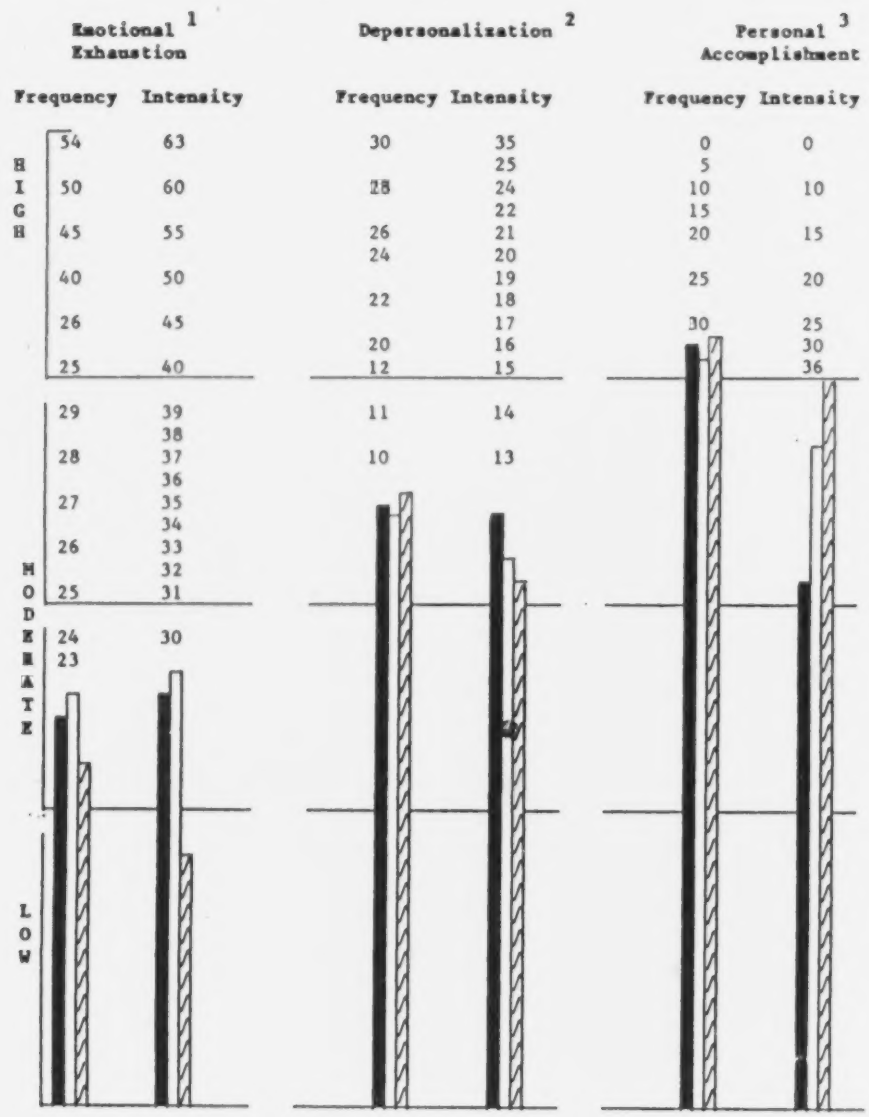
Var 35 Energy Level
Var 36 Self Esteem
Var 37 Guilt
Var 38 Social Introversion
Var 39 Pessimism
Var 40 Irritability
Var 41 Sad Mood
Var 42 Instrumental Helplessness
Var 43 Total SMDI score

(These scales are shown on Page 15 and 16 of Table IV.) None of these scales of the SMD show significant differences. The Beck Depression Inventory results are shown as, Var50 Depression level Page 17 of Table IV. These results show no significant differences in the amount of normal or clinical depression between the High Potential Low Achievers and High Potential High Achievers.

No significant differences between the two groups were revealed on the scales of the Modified MBI. (See Var 44 through Var 49, Page 17 Table IV and Figure 4.)

FIGURE 4

MODIFIED MASLACH BURN-OUT PROFILE
FOR HIGH POTENTIAL HIGH ACHIEVERS AND
HIGH POTENTIAL LOW ACHIEVERS



Hi-Lo ■ General Population ▨

Hi-Hi □

[1] Emotional Exhaustion = Feelings of being emotionally over-extended and exhausted by one's work.

[2] Depersonalization = Unfeeling and impersonal respojnse towards one's activities, work or others.

[3] Personal Accomplishment = Feelings of accomplishment and achievement in one's work or activities.

Other Significant Differences

Sex:
Distribution of sex in the High Potential-Low Achievers and High Potential-High Achievers shows more males are present in the High Potential-Low Achievers than are present in the High Potential-High Achievers. The data are presented in Table V.

Feelings Regarding Performance:
When asked to indicate their feelings regarding their academic performance, 17 High Potential-Low Achievers and 8 High Potential-High Achievers are dissatisfied with their performance; 14 High Potential-Low Achievers and 19 High Potential-High Achievers are moderately dissatisfied; 2 High Potential-Low Achievers and 7 High Potential-High Achievers are very satisfied with their performance. (See Table V.)

Importance of Full-time Employment:
The importance of a full time job for the MGM-GATE population was rated as very important by 50.8%, somewhat important by 36.9% and not important by 12.3%. (See Table V.)

The High Potential-High Achievers more frequently consider full time work as an important issue in their lives than High Potential-Low Achievers.

Birth Month:
The birth month often plays an important role in academic performance capabilities of young pupils. The more maturity the better the performance of pupils on the elementary school years of development. Consequently, examination of the distribution of the MGM-GATE's regarding their birth months was undertaken.

Those born during the first half (January to June) and those born during the second half of the year (July to December) are unequally distributed in the two groups. The data are shown in Table V.

A higher proportion of the High Potential-High Achievers were born in the second half of the year and a higher proportion of the High Potential-Low Achievers were born in the first half of the year.

Beat the System:
All of the subjects were asked to indicate if they were prone to attempt to "beat the system". The responses of the two groups are shown in Table V.

The distribution for the whole group of MGM-GATE's shows that 52.9% said "yes", they strive to beat the system" and 47.1% said "no". More (65%) of the High Potential-Low Achievers indicated that they try to "beat the system" whereas only 40% of the High Potential-High Achievers indicated that they try to "beat the system."

Emotional Support:
Emotional support by the father was rated by the subjects as low, low medium, medium, medium high, and high. The High Potential-High Achievers responded by giving rating of the father's emotional support as high in contrast to the medium rating given by the High Potential-Low Achievers. (See Table V.)

Volunteer Work
The student's were also asked to indicate if they have done any volunteer work. In Table V the distribution of the two groups who have or have not done volunteer work is presented. The High Potential-High Achievers more frequently (62.9%) indicated that they have been involved in volunteer work in contrast to the High Potential-Low Achievers (38.2%) (See Table V).

Recreational Activities
The students were asked to indicate the frequency of their recreational activities as follows. Less than once a week, once a week, twice a week, three times a week, and more than three times a week. The data shown in Table V show that the Hi P- Low Achievers indicated recreational activities 3 or more times per week more frequently than did the High Potential-High Achievers.

Encouragement From Significant Others
When asked to rate the supportiveness of the significant other (parents and/or spouse) as not very, moderately or highly supportive, Hi P-Hi achievers indicated more frequently that the significant other was not very supportive than did the High Potential-Low Achievers (See Table V)

Pursuit of Certificate
Students were asked to indicate if they were pursuing a Certificate program, less than 8 (12%) of the total group indicated the pursuit of a certificate with 7 High Potential-High Achievers indicating their pursuit of a certificate.

Importance of a Full-time Job
The issue of employment and the importance of full employment is a critical one for most community college students. The students were asked to indicate how important getting a full time job was to them. Most indicated that this was very important (86%) and somewhat important. Only 2 of the High Potential-High Achievers in contrast to 6 High Potential-Low Achievers indicated this as not very important. (See Table V)

Mothers Working
The frequency of mothers working is higher among the High Potential-Low Achievers than was the frequency among the High Potential-High Achievers. (See Table V)

Time on the Job

Many of the MGM-GATE have been employed working either part time or nearly full time. One issue was how long the students were engaged in gainful employment. A comparison of the High Potential-Low Achievers and High Potential-High Achievers suggests the following contrast wherein the High Potential-Low Achievers have been employed only one year or have held the job for 3 years and higher proportion of the High Potential-High Achievers have been employed on the same job for 1 to 5 years. This particular observation is most likely a result of the age differences between the two groups with High Potential-High Achievers being approximately 2 to 3 years older than the High Potential-Low Achievers.

Other Variables

On all of the remaining variables no significant differences were found between the High Potential-Low Achievers and the High Potential-High Achievers.

TABLE V

COMPARISON OF HI P-LOW ACHIEVERS AND HI P-HIGH ACHIEVERS ON THE VARIABLES OF SEX, WORKING MOTHERS, IMPORTANCE OF FULL TIME WORK, ENROLLMENT IN CERTIFICATE PROGRAMS, TIME ON JOBS, SUPPORT OF SIGNIFICANT OTHER TO PURSUE COLLEGE, RECREATIONAL BEHAVIOR, FEELINGS REGARDING ACADEMIC PERFORMANCE, VOLUNTEER WORK, TEACHERS CONTRIBUTION TO TIME OF GREATEST DIFFICULTY, FATHER'S ENCOURAGEMENT OF INTELLECTUAL CAPABILITIES, EMOTIONAL SUPPORT OF FATHER, HONESTY AND GENUINENESS OF MOTHER, GRADE SPREAD, TENDENCY TO TRY TO BEAT THE SYSTEM, GRADE LEVEL AT TIME OF IDENTIFICATION.

(Consists of 18 pages)

FILE MGMGATE1 (CREATION DATE = 05/07/88)

* CROSSTABULATION OF *
VAR81 SEX BY MGMT MGMGATE TYPE
* PAGE 1 OF 1

		MGMT		
	COUNT	BURNED OUT	NOT BURNED OUT	ROW TOTAL
	ROW PCT			
	COL PCT			
	TOT PCT	1.	2.	
VAR81				
1. MALE		23	10	33
		69.7	30.3	48.5
		65.7	27.8	
		32.4	14.1	
2. FEMALE		12	26	38
		31.6	68.4	53.5
		34.3	72.2	
		16.9	36.6	
COLUMN TOTAL		35	36	71
		49.3	50.7	100.0

CORRECTED CHI SQUARE = 8.79867 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = .0030
RAW CHI SQUARE = 10.26706 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = .0014
PHI = .38027
CONTINGENCY COEFFICIENT = .35544
LAMBDA (ASYMMETRIC) = .33333 WITH VAR81 DEPENDENT. = .37143 WITH MGMT DEPENDENT.
LAMBDA (SYMMETRIC) = .35294
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = .10737 WITH VAR81 DEPENDENT. = .10700 WITH MGMT DEPENDENT.
UNCERTAINTY COEFFICIENT (SYMMETRIC) = .10718
KENDALL'S TAU B = .38027 SIGNIFICANCE = .0007
KENDALL'S TAU C = .37929 SIGNIFICANCE = .0007
GAMMA = .66574
SOMERS'S D (ASYMMETRIC) = .37937 WITH VAR81 DEPENDENT. = .38118 WITH MGMT DEPENDENT.
SOMERS'S D (SYMMETRIC) = .38027
ETA = .38027 WITH VAR81 DEPENDENT. = .38027 WITH MGMT DEPENDENT.
PEARSON'S R = .38027 SIGNIFICANCE = .0005

NUMBER OF MISSING OBSERVATIONS = 1

FILE MGMGATE1 (CREATION DATE = 05/07/88)

* CROSSTABULATION OF *
VAR85 MOTHER WORK BY MGMT MGMGATE TYPE
* * * * * * * * * * * * * * * * * * * \

FILE MGMGATE1 (CREATION DATE = 05/07/88)

* C R O S S T A B U L A T I O N O F *
VAR78 IMP FLL TIME JOB BY MGMT MGMGATE TYPE
* PAGE 1 OF 1

	MGMT		
COUNT / ROW PCT / COL PCT / TOT PCT	1.BURNED OUT	2.NOT BURNED OUT	ROW TOTAL
VAR78			
1. VERY IMP	12 / 36.4 / 36.4 / 18.5	21 / 63.6 / 65.6 / 32.3	33 / 50.8
2. SOMEWHAT IMPORTA	15 / 62.5 / 45.5 / 23.1	9 / 37.5 / 28.1 / 13.8	24 / 36.9
3. NOT IMPORTANT	6 / 75.0 / 18.2 / 9.2	2 / 25.0 / 6.3 / 3.1	8 / 12.3
COLUMN TOTAL	33 / 50.8	32 / 49.2	65 / 100.0

CHI SQUARE = 5.94057 WITH 2 DEGREES OF FREEDOM SIGNIFICANCE = .0513
CRAMER'S V = .30231
CONTINGENCY COEFFICIENT = .28938
LAMBDA (ASYMMETRIC) = .09375 WITH VAR78 DEPENDENT. = .28125 WITH MGMT DEPENDENT.
LAMBDA (SYMMETRIC) = .18750
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = .04822 WITH VAR78 DEPENDENT. = .06748 WITH MGMT DEPENDENT.
UNCERTAINTY COEFFICIENT (SYMMETRIC) = .05625
KENDALL'S TAU B = -.29007 SIGNIFICANCE = .0078
KENDALL'S TAU C = -.31527 SIGNIFICANCE = .0078
GAMMA = -.50685
SOMERS'S D (ASYMMETRIC) = -.31534 WITH VAR78 DEPENDENT. = -.28683 WITH MGMT DEPENDENT.
SOMERS'S D (SYMMETRIC) = -.28908
ETA = .29838 WITH VAR78 DEPENDENT. = .30231 WITH MGMT DEPENDENT.
PEARSON'S R = -.29838 SIGNIFICANCE = .0083

NUMBER OF MISSING OBSERVATIONS = 7

FILE MGMGATE1 (CREATION DATE = 05/07/88)

* C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * * * * * *
VAR78 ENROLL CERT VOC BY MGMT MGMGATE TYPE
* * * * * * * * * * * * * * * * * * * \

FILE MGMGATE1 (CREATION DATE = 05/07/88)

* CROSSTABULATION OF *
VAR95 TIME ON JOB BY MGMT MGMGATE TYPE
* * * * * * * * * * * * * * * * * * * \

FILE MGMGATE1 (CREATION DATE = 05/07/88)

* CROSSTABULATION OF *
VAR95 TIME ON JOB BY MGMT MGMGATE TYPE
* * * * * * * * * * * * * * * * * * * \

FILE MGMGATE1 (CREATION DATE = 05/07/88)

* C R O S S T A B U L A T I O N O F *
VAR72 SIGN OTHER COLLEGE BY MGMT MGMGATE TYPE
* PAGE 1 OF 1

	MGMT		
COUNT			
ROW PCT	BURNED O	NOT BURN	ROW
COL PCT	UT	ED OUT	TOTAL
TOT PCT	1.	2.	
VAR72			
2.	0	5	5
NOT VERY SUPPORT	.0	100.0	7.6
	.0	15.2	
	.0	7.6	
3.	12	8	20
MODERATELY	60.0	40.0	30.3
	36.4	24.2	
	18.2	12.1	
4.	21	20	41
HIGHLY SUPPORTIV	51.2	48.8	62.1
	63.6	60.6	
	31.8	30.3	
COLUMN TOTAL	33 50.0	33 50.0	66 100.0

CHI SQUARE = 5.82439 WITH 2 DEGREES OF FREEDOM SIGNIFICANCE = .0544
CRAMER'S V = .29707
CONTINGENCY COEFFICIENT = .28477
LAMBDA (ASYMMETRIC) = .00000 WITH VAR72 DEPENDENT. = .15152 WITH MGMT DEPENDENT.
LAMBDA (SYMMETRIC) = .08621
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = .06893 WITH VAR72 DEPENDENT. = .08483 WITH MGMT DEPENDENT.
UNCERTAINTY COEFFICIENT (SYMMETRIC) = .07606
KENDALL'S TAU B = -.08402 SIGNIFICANCE = .2429
KENDALL'S TAU C = -.08540 SIGNIFICANCE = .2429
GAMMA = -.16230
SOMERS'S D (ASYMMETRIC) = -.08540 WITH VAR72 DEPENDENT. = -.08267 WITH MGMT DEPENDENT.
SOMERS'S D (SYMMETRIC) = -.08401
ETA = .14384 WITH VAR72 DEPENDENT. = .29707 WITH MGMT DEPENDENT.
PEARSON'S R = -.14384 SIGNIFICANCE = .1246

NUMBER OF MISSING OBSERVATIONS = 6

FILE MGMGATE1 (CREATION DATE = 05/07/86)

* C R O S S T A B U L A T I O N O F *
VAR80 WKLY REC BY MGMT MGMGATE TYPE
* PAGE 1 OF 1

VAR80	MGMT 1.BURNED OUT	2.NOT BURNED OUT	ROW TOTAL
1. LESS THAN ONCE W	4	2	6
	ROW PCT 66.7	33.3	9.0
	COL PCT 12.1	5.9	
	TOT PCT 6.0	3.0	
2. ONCE A WEEK	5	11	16
	ROW PCT 31.3	68.8	23.9
	COL PCT 15.2	32.4	
	TOT PCT 7.5	16.4	
3. TWICE A WEEK	8	14	22
	ROW PCT 36.4	63.6	32.8
	COL PCT 24.2	41.2	
	TOT PCT 11.9	20.9	
4. THREE TIMES	7	3	10
	ROW PCT 70.0	30.0	14.9
	COL PCT 21.2	8.8	
	TOT PCT 10.4	4.5	
5. MORE THAN THREE	9	4	13
	ROW PCT 69.2	30.8	19.4
	COL PCT 27.3	11.8	
	TOT PCT 13.4	6.0	
COLUMN TOTAL	33 49.3	34 50.7	67 100.0

CHI SQUARE = 8.08298 WITH 4 DEGREES OF FREEDOM SIGNIFICANCE = .0893
CRAMER'S V = .34690
CONTINGENCY COEFFICIENT = .32774
LAMBDA (ASYMMETRIC) = .02222 WITH VAR80 DEPENDENT. = .33333 WITH MGMT DEPENDENT.
LAMBDA (SYMMETRIC) = .15385
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = .04034 WITH VAR80 DEPENDENT. = .08881 WITH MGMT DEPENDENT.
UNCERTAINTY COEFFICIENT (SYMMETRIC) = .05548
KENDALL'S TAU B = -.18417 SIGNIFICANCE = .0489
KENDALL'S TAU C = -.22811 SIGNIFICANCE = .0489
GAMMA = -.28784
SOMERS'S D (ASYMMETRIC) = -.22818 WITH VAR80 DEPENDENT. = -.14868 WITH MGMT DEPENDENT.
SOMERS'S D (SYMMETRIC) = -.18003
ETA = .19593 WITH VAR80 DEPENDENT. = .34690 WITH MGMT DEPENDENT.
PEARSON'S R = -.19593 SIGNIFICANCE = .0580

NUMBER OF MISSING OBSERVATIONS = 5

78

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FILE MGMGATE1 (CREATION DATE = 05/07/88)

* CROSSTABULATION OF *
VAR66 FEEL RE PERFORMANCE BY MGMT MGMGATE TYPE
* PAGE 1 OF 1

VAR66	COUNT / ROW PCT / COL PCT / TOT PCT	MGMT 1.0 BURNED OUT	MGMT 2.0 NOT BURNED OUT	ROW TOTAL
2. DISSATISFIED		17	8	25
		68.0	32.0	37.3
		51.5	23.5	
		25.4	11.9	
3. MODERATELY SATIS		14	19	33
		42.4	57.6	49.3
		42.4	55.9	
		20.9	28.4	
4. VERY SA		2	7	9
		22.2	77.8	13.4
		6.1	20.6	
		3.0	10.4	
COLUMN TOTAL		33 49.3	34 50.7	67 100.0

CHI SQUARE = 6.76193 WITH 2 DEGREES OF FREEDOM SIGNIFICANCE = .0340
CRAMER'S V = .31769
CONTINGENCY COEFFICIENT = .30277
LAMBDA (ASYMMETRIC) = .08824 WITH VAR66 DEPENDENT. = .27273 WITH MGMT DEPENDENT.
LAMBDA (SYMMETRIC) = .17910
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = .05297 WITH VAR66 DEPENDENT. = .07539 WITH MGMT DEPENDENT.
UNCERTAINTY COEFFICIENT (SYMMETRIC) = .06223
KENDALL'S TAU B = .30422 SIGNIFICANCE = .0049
KENDALL'S TAU C = .33326 SIGNIFICANCE = .0049
GAMMA = .52975
SOMERS'S D (ASYMMETRIC) = .33333 WITH VAR66 DEPENDENT. = .27765 WITH MGMT DEPENDENT.
SOMERS'S D (SYMMETRIC) = .30296
ETA = .31669 WITH VAR66 DEPENDENT. = .31769 WITH MGMT DEPENDENT.
PEARSON'S R = .31669 SIGNIFICANCE = .0045

NUMBER OF MISSING OBSERVATIONS = 5

FILE MGMGATE1 (CREATION DATE = 05/07/86)

* C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * * * * * *
VAR98 VOLUNT WORK BY MGMT MGMGATE TYPE
* PAGE 1 OF 1

	MGMT		
COUNT ROW PCT COL PCT TOT PCT	1. BURNED OUT	2. NOT BURNED OUT	ROW TOTAL
VAR98			
1. YES	13 37.1 38.2 18.8	22 62.9 62.9 31.9	35 50.7
2. NO	21 61.8 61.8 30.4	13 38.2 37.1 18.8	34 49.3
COLUMN TOTAL	34 49.3	35 50.7	69 100.0

CORRECTED CHI SQUARE = 3.25594 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = .0712
RAW CHI SQUARE = 4.18302 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = .0408
PHI = .24622
CONTINGENCY COEFFICIENT = .23908
LAMBDA (ASYMMETRIC) = .23529 WITH VAR98 DEPENDENT. = .23529 WITH MGMT DEPENDENT.
LAMBDA (SYMMETRIC) = .23529
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = .04419 WITH VAR98 DEPENDENT. = .04419 WITH MGMT DEPENDENT.
UNCERTAINTY COEFFICIENT (SYMMETRIC) = .04419
KENDALL'S TAU B = -.24622 SIGNIFICANCE = .0212
KENDALL'S TAU C = -.24817 SIGNIFICANCE = .0212
GAMMA = -.46434
SOMERS'S D (ASYMMETRIC) = -.24622 WITH VAR98 DEPENDENT. = -.24622 WITH MGMT DEPENDENT.
SOMERS'S D (SYMMETRIC) = -.24622
ETA = .24622 WITH VAR98 DEPENDENT. = .24622 WITH MGMT DEPENDENT.
PEARSON'S R = -.24622 SIGNIFICANCE = .0207

NUMBER OF MISSING OBSERVATIONS = 3

FILE MGMGATE1 (CREATION DATE = 05/07/88)

* C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * * * * * *
VAR106 TEACHERS BY MGMT MGMGATE TYPE
* * * * * * * * * * * * * * * * * * * \

FILE MGMGATE1 (CREATION DATE = 05/07/86)

* CROSSTABULATION OF *
VAR121 ENC OF FATHER INTELL BY MGMT MGMGATE TYPE
* PAGE 1 OF 1

	MGMT		
COUNT / ROW PCT / COL PCT / TOT PCT	1. BURNED OUT	2. NOT BURNED OUT	ROW TOTAL
VAR121			
1. LOW	2 33.3 6.1 3.0	4 66.7 12.1 6.1	6 9.1
2. LOW MEDIUM	5 71.4 15.2 7.6	2 28.6 6.1 3.0	7 10.6
3. MEDIUM	1 11.1 3.0 1.5	8 88.9 24.2 12.1	9 13.6
4. MEDIUM	9 64.3 27.3 13.6	5 35.7 15.2 7.6	14 21.2
5. HIGH	16 53.3 48.5 24.2	14 46.7 42.4 21.2	30 45.5
COLUMN TOTAL	33 50.0	33 50.0	66 100.0

CHI SQUARE = 8.67302 WITH 4 DEGREES OF FREEDOM SIGNIFICANCE = .0698
CRAMER'S V = .36250
CONTINGENCY COEFFICIENT = .34080
LAMBDA (ASYMMETRIC) = .00000 WITH VAR121 DEPENDENT. = .27273 WITH MGMT DEPENDENT.
LAMBDA (SYMMETRIC) = .13043
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = .05085 WITH VAR121 DEPENDENT. = .10381 WITH MGMT DEPENDENT.
UNCERTAINTY COEFFICIENT (SYMMETRIC) = .06828
KENDALL'S TAU B = -.09091 SIGNIFICANCE = .2118
KENDALL'S TAU C = -.10836 SIGNIFICANCE = .2118
GAMMA = -.14861
SOMERS'S D (ASYMMETRIC) = -.10836 WITH VAR121 DEPENDENT. = -.07628 WITH MGMT DEPENDENT.
SOMERS'S D (SYMMETRIC) = -.08953
ETA = .10148 WITH VAR121 DEPENDENT. = .36250 WITH MGMT DEPENDENT.
PEARSON'S R = -.10148 SIGNIFICANCE = .2087

NUMBER OF MISSING OBSERVATIONS = 6

FILE MGMGATE1 (CREATION DATE = 05/07/88)

* C R O S S T A B U L A T I O N O F *
VAR124 EMOT SUP FATHER BY MGMT MGMGATE TYPE
* * * * * * * * * * * * * * * * * * * \

FILE MGMGATE1 (CREATION DATE = 05/07/88)

* CROSSTABULATION OF *
VAR131 HON GEN MOTHER BY MGMT MGMGATE TYPE
* * * * * * * * * * * * * * * * * * * \

FILE MGMGATE1 (CREATION DATE = 05/07/88)

* CROSSTABULATION OF *
VAR161 GRD SPRD BY MGMT MGMGATE TYPE
* * * * * * * * * * * * * * * * * * * \

FILE MGMGATE1 (CREATION DATE = 05/07/88)

* CROSSTABULATION OF *
VAR197 BIRTH DATE BY MGMT MGMGATE TYPE
* PAGE 1 OF 1

		MGMT		
	COUNT	1.BURNED OUT	2.NOT BURNED OUT	ROW TOTAL
	ROW PCT			
	COL PCT			
	TOT PCT			
VAR197				
1. JAN TO JUNE		18	10	28
		64.3	35.7	41.2
		54.5	28.6	
		26.5	14.7	
2. JULY TO DECEMBER		15	25	40
		37.5	62.5	58.8
		45.5	71.4	
		22.1	36.8	
COLUMN TOTAL		33	35	68
		48.5	51.5	100.0

CORRECTED CHI SQUARE = 3.71939 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = .0538
RAW CHI SQUARE = 4.73098 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = .0298
PHI = .26377
CONTINGENCY COEFFICIENT = .25504
LAMBDA (ASYMMETRIC) = .10714 WITH VAR197 DEPENDENT. = .24242 WITH MGMT DEPENDENT.
LAMBDA (SYMMETRIC) = .18033
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = .05194 WITH VAR197 DEPENDENT. = .05080 WITH MGMT DEPENDENT.
UNCERTAINTY COEFFICIENT (SYMMETRIC) = .05136
KENDALL'S TAU B = .26377 SIGNIFICANCE = .0154
KENDALL'S TAU C = .25952 SIGNIFICANCE = .0154
GAMMA = .50000
SOMERS'S D (ASYMMETRIC) = .25974 WITH VAR197 DEPENDENT. = .26786 WITH MGMT DEPENDENT.
SOMERS'S D (SYMMETRIC) = .26374
ETA = .26377 WITH VAR197 DEPENDENT. = .26377 WITH MGMT DEPENDENT.
PEARSON'S R = .26377 SIGNIFICANCE = .0149

NUMBER OF MISSING OBSERVATIONS = 4

FILE MGMGATE1 (CREATION DATE = 05/07/88)

* CROSSTABULATION OF *
VAR159 BEAT SYSTEM BY MGMT MGMGATE TYPE
* * * * * * * * * * * * * * * * * * * \

FILE MGMGATE1 (CREATION DATE = 05/07/88)

* C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * * * * * *
VAR98 GRADE AT ID BY MGMT MGMGATE TYPE
* PAGE 2 OF 2

VAR98	MGMT 1.BURNED OUT	2.NOT BURNED OUT	ROW TOTAL
8.	0	1	1
	.0	100.0	1.4
	.0	2.9	
	.0	1.4	
9.	0	3	3
	.0	100.0	4.3
	.0	8.6	
	.0	4.3	
10.	2	2	4
	50.0	50.0	5.8
	5.9	5.7	
	2.9	2.9	
11.	0	4	4
	.0	100.0	5.8
	.0	11.4	
	.0	5.8	
COLUMN TOTAL	34 / 49.3	35 / 50.7	69 / 100.0

CHI SQUARE = 18.31671 WITH 10 DEGREES OF FREEDOM SIGNIFICANCE = .0909
CRAMER'S V = .48629
CONTINGENCY COEFFICIENT = .43732
LAMBDA (ASYMMETRIC) = .00000 WITH VAR98 DEPENDENT. = .35294 WITH MGMT DEPENDENT.
LAMBDA (SYMMETRIC) = .13793
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = .08906 WITH VAR98 DEPENDENT. = .22077 WITH MGMT DEPENDENT.
UNCERTAINTY COEFFICIENT (SYMMETRIC) = .10521
KENDALL'S TAU B = .14746 SIGNIFICANCE = .0798
KENDALL'S TAU C = .19492 SIGNIFICANCE = .0798
GAMMA = .21928
SOMERS'S D (ASYMMETRIC) = .19496 WITH VAR98 DEPENDENT. = .11154 WITH MGMT DEPENDENT.
SOMERS'S D (SYMMETRIC) = .14190
ETA = .22107 WITH VAR98 DEPENDENT. = .48629 WITH MGMT DEPENDENT.
PEARSON'S R = .22107 SIGNIFICANCE = .0340

NUMBER OF MISSING OBSERVATIONS = 3

General Impressions from the Individual Interviews:

Nearly all subjects were interviewed and received a summary of their test results. During these interviews several consistent themes occurred. These included the response to their educational experiences during junior and senior high school, their experiences in the world of work or employment, the overall experience of being gifted and its impact, and the manner in which as college students they plan or schedule their activities.

During their junior and senior high school experiences these students reported repeated feelings of distress and concern over their academic performance, the lack of intellectual challenge and the continued maintenance of "interest". Many reported a sense of disappointment when they moved into the junior and senior years of their K-12 education, felt that there were fewer attempts by the "system" to provide challenge and encouragement. Many were exploited by their teachers by being asked to grade papers and engage in other activities that were not helpful to their academic and personal development. As a companion phenomenon many reported concerns regarding the difficulty of mediating between their academic and social experiences, struggling to maintain a reasonable balance. Parental expectations and "pressure" from within themselves to achieve and the fulfillment of social developmental needs and interests were not in congruence. High potential high achievers managed the conflicting demands more easily than did the high potential low achievers, with many in both groups contemplating their withdrawal from the "system". The need to be autonomous financially prompted many to begin earning money in the world of work. For many work was a way of earning autonomy. But, such work outside of school and the recognition of their competencies by their supervisors often lead to the escalation of their responsibilities on the job.

Upon commencement of their college careers many become emancipated adults either out of necessity or circumstances beyond their control or specifically choose to be totally emancipated. Work and college studies were, consequently, equally important. The tendency to become "over extended" was already present, but became exacerbated for many as they became immersed in their work and college careers. Their "brinkmanship" abilities were being challenged as they struggled with the self imposed "stress" and state of being on the brink of emotional and physical exhaustion. Consequently, choices were made that extended and delay the completion of their college endeavors.

In addition, many progressively became aware of the "burden of being gifted and able". The burden of being gifted able people encompasses high expectations originating from within themselves and from the significant others, a demand for high performance from themselves and from their teachers and significant others, being impatient with incompetency, prone to remove themselves from being unique, which prompts the self-imposed isolation that many experience. By insulating themselves they succeed in reducing the burden of being gifted, diminish the excessive expectations and achieve less than they wish to achieve.

Another frequent phenomenon was reported. During the K-12 experiences they received little assistance with the tasks of being a student scholar. Left to their own devices, they developed study attitudes and behaviors that are not congruent with the demands of the collegiate experiences. These prior behaviors and life management styles place many in great jeopardy in their first and second semester of their college experience. Such behaviors ultimately result in lower academic performance (indicated by grades). At some point in their academic college history, they recognize the need to change. Such change, however, is almost "too late". The completion of their Bachelor Degrees is not in question; instead their acceptance and admission to the graduate programs which require high grade point averages are in question. These critical grades achieved during their first 60 units of college work mitigate admission to the post graduate studies fundamental to their fulfillment of their "promises" present in the beginning of their educational careers.

Many have built a set of self-instructions, during the K-12 experiences, that produce self destructive outcomes in the academic arenas of their lives. These include "I can do it at the last minute." , "I don't have to review, I already know it." , "I will do it my way!" Such self instructions, which they repeatedly follow explicitly, prevent them from achieving the "Student-Scholar" posture during their high school year and requires one to two years in college to reverse or alter those self instructions enabling them to produce the outstanding achievement required for their future educational endeavors.

Summary and Conclusions:

This study produces a profile of characteristics of the college age former MGM-GATE population attending Fullerton College which includes the following:

First and foremost they are truly human; struggle with the ever present task of mediating between academic responsibilities and external life and employment responsibilities and exigencies; manifest proclivities to over extend themselves in the academic and job arenas of their lives; have personality characteristics that can lead to reduced performance and a prolonged time period to accomplish their stated educational goals; need individual assistance on their future career - educational objectives; receive variable levels of encouragement and support from their families of origin, the classroom teacher and counselors, the immediate job supervisory personnel who capitalize on their abilities and sundry levels of competencies; and they make uniquely incredible choices as they consider their options as college students.

In addition, they tend to isolate themselves from the influence of the structured aspects of institutional services (only 4 could identify their counselor); do not intentionally seek out individual assistance from their teachers being hesitant to call attention to themselves, consequently remaining anonimous in the academic community of the college. Frequently, they seek intellectual stimulation, but do not wish to subject themselves to the continuation of the "burden of being gifted" striving to blend and be seen as not unique. Moreover, there is clear evidence confirming the original observations. These are:

1) A larger number in the community college population, than originally believed, have been involved in programs for mentally gifted students or were previously identified during the K-12 educational experiences as mentally gifted students.
2) Demonstrate high-low achievement with great variability and irregularity in their achievement in their high school experience.
3) Unclear in their educational motivations and objectives or career objectives and plans.
4) Demonstrate various skill deficiencies in cognitive processes such as reading, writing, mathematics or study skills especially, wherein the student is high in one skill and low in another producing obvious profile discrepancies.
5) Manifest high "need for achievement" and low achievement on life tasks and academic performance; and, experience failure and performance anxiety.
6) Manifest cognitive styles customarily not associated with high performance in standard academic institutional processes and evaluation of performance. The cognitive styles which contribute to superior academic performance are: reasoning by applied rules, looking for similarities and differences, weighing all factors, use of non-verbal language, high commitment to personal principles, working under direction, use of persuasion, awareness of time, etc.

7) Likely to be "high risk" students.
8) Manifest classic "burn-out" behavior such as exhaustion, cynicism and counter-productive behavior.
9) Manifest highly divergent career and avocational interest.

Recommendations:

On the basis of the information obtained in this study of former MGM-GATE students present in the Fullerton College population, implementation of programs for the more able student should encompass the following:

1) A reconsideration of using Advanced Placement and CLEP test results as a basis for granting college credit toward the AA Degree and transfer credit to subsequent upper division colleges and universities.

2) Development of a special program of study for our more academically able students which would encompass aspects of the typical "honors" program in California Community Colleges. It is mandatory that Fullerton College exercise great caution to avoid the tendency to see "more as better", producing the strong possibility that the student experiences the distress caused by being asked to do "more" simply because the student is academically able. Instead, the focus must be on levels of presentation and involvement of students and faculty in the learning process and the discipline per se.

3) Development of a self-development intervention program designed to focus on the issues of self esteem, productive study styles, career and educational projections, and planning; and, the process of becoming a scholar.

4) Development of a program encompassing the joint efforts of the communities of Industry and Commerce and Fullerton College (NOCCCD) to establish:

   A) a "mentor" partnership of faculty and employment supervisors to facilitate, encourage, and offer special assistance on a person-to-person level,

   B) a work-scholarship-internship program for the more able college student which would expand the experiences and opportunities in "the real world" as well as the academic environment, (Antioch Model)

   C) a fund to supplement self-generated financial resources of the able student enabling the student to pursue with less financial stress their academic goals, to assist with major crisis of emergency financial character (such as transportation breakdown and other financial devastations) which would deter continuation or force withdrawal from their academic programs,

D) a contract between the college and the employer which would mitigate the impact of over-extension in both arenas of student activity. (This is a frequent phenomenon reported by the overwhelming majority of our self supporting students),

5) Seek external funding from the "Foundations" to assist in the accomplishment of the above recommended programs.

APPENDIX

INSTRUMENTS:

CALIFORNIA PSYCHOLOGICAL INVENTORY

The inventory is designed to be used with normal (non-disturbed) subjects providing information about the following aspects of personality:

HIGH SCORERS tend to be seen as:	SCALE AND PURPOSE	LOW SCORERS tend to be seen as:
	CLASS I. MEASURES OF POISE, ASCENDANCY, AND SELF-ASSURANCE	
Aggressive, confident, persistent, and planful; as being persuasive and verbally fluent; as self-reliant and independent; and as having leadership potential and initiative.	1. Do (dominance) To assess factors of leadership ability, dominance, persistence, and social initiative.	Retiring, inhibited, commonplace and unassuming; as being slow in thought and action; as avoiding of situations of tension and decision; and as lacking in self-confidence.
Ambitious, active, forceful, insightful, resourceful, and versatile; as being ascendent and self-seeking; effective in communication; and as having personal scope and breadth of interests.	2. Cs (capacity for status) To serve as an index of an individual's capacity for status (not his actual or achieved status). The scale attempts to measure the personal qualities and attributes which underlie and lead to status.	Apathetic, shy, conventional dull, mild, simple and slow; as being stereotyped in thinking; restricted in outlook and interests; and as being uneasy and awkward in new or unfamiliar social situations.
Outgoing, enterprising, and ingenious; as being competitive and forward; and as original and fluent in thought.	3. Sy (sociability) To identify persons of outgoing, sociable, participative temperament.	Awkward, conventional, quiet, submissive, and unassuming; as being detached and passive in attitude; and as being suggestible and overly influenced by other's reactions and opinions.
Clever enthusiastic, imaginative, quick, informal,spontaneous, and talkative; as being active and vigorous; and as having an expressive, ebullient nature.	4. Sp (social presence) To assess factors such as poise, sponteneity, and self-confidence in personal and social interaction.	Deliberate, moderate, patient self-restrained, and simple; as vacillating and uncertain in decision; and as being literal and unoriginal in thinking and judging.
Intelligent, outspoken, sharp-witted, demanding, aggressive and self-centered; as being persuasive and verbally fluent; and as possessing self-confidence and self assurance.	5. Sa (self-acceptance) To assess factors such as sense of personal worth, self-acceptance, and capacity for independent thinking and action.	Methodical, conservative, dependable, conventional, easygoing, and quiet; as self-abasing and given to feelings of guilt and self-blame; and as being passive in action and narrow in interests.
Energetic, enterprising, alert ambitious, and versatile; as being productive and active; and as valuing work and effort for its own sake.	6. Wb (sense of well being) To identify persons who minimize their worries and complaints, and who are relatively free from self-doubt and disillusionment.	Unambitious, leisurely, awkward, cautious, apathetic, and conventional; as being self-defensive and apologetic, and as constricted in thought and action.

HIGH SCORERS tend to be seen as:	SCALE AND PURPOSE	LOW SCORERS tend to be seen as:
CLASS II. MEASURES OF SOCIALIZATION, MATURITY AND RESPONSIBILITY		
Planful, responsible, thorough, progressive, and independent; as being conscientious and dependable; resourceful and efficient; and as being alert to ethical and moral issues.	7. Re (responsibility) To identify persons of conscientious, responsible, and dependable disposition and temperament.	Immature, moody, lazy, awkward, changeable, and disbelieving; as being influenced by personal bias, spite and dogmatism; and as under-controlled and impulsive in behavior.
Serious, honest, industrious, modest, obliging, sincere, and steady; as being conscientious and responsible; and as being self-denying and conforming.	8. So (socialization) To indicate the degree of social maturity, integrity, and rectitude which the individual has attained.	Defensive, demanding, opinionated, resentful, stubborn, headstrong, rebellious, and undependable; as being guileful and decietful in dealing with others; and as given to excess, exhibition, and ostentation in their behavior.
Calm, patient, practical, slow, self-denying, inhibited, thoughtful, and deliberate; as being strict and thorough in their own work and in their expectations for others; and as being honest and conscientious.	9. Sc (self-control) To assess the degree and adequacy of self-regulation and self-control and freedom from impulsivity and self-centeredness.	Impulsive, shrewd, excitable, irritable, self-centered, and uninhibited; as being aggressive and assertive; and as overemphasizing personal pleasure and self-gain.
Enterprising, informal, quick, tolerant, clear-thinking, and resourceful; as being intellectually able and verbally fluent; and as having broad and varied interests.	10. To (tolerance) To identify persons with permissive, accepting, and non-judgemental social beliefs and attitude.	Suspicious, narrow, aloof, wary, and retiring; and being passive and overly judgemental in attitude; and as disbelieving and distrustful in personal and social outlook.
Co-operative, enterprising, outgoing, sociable, warm, and helpful; as being concerned with making a good impression; and as being diligent and persistent.	11. Gi (good impression) To identify persons capable of creating a favorable impression, and who are concerned about how others react to them.	Inhibited, cautious, shrewd, wary, aloof, and resentful; as being cool and distant in their relationships with others; and as being self-centered and too little concerned with the needs and wants of others.
Dependable, moderate, tactful, reliable, sincere, patient, steady and realistic; as being, honest and conscientious; and as having common sense and good judgement.	12. Cm (communality) To indicate the degree to which an individual's reactions and responses correspond to the modal ("common") pattern established for the inventory.	Impatient, changeable, complicated, imaginative, disorderly, nervous, restless, and confused; as being guileful, and decietful; inattentive and forgetful; and as having internal conflicts and problems.
CLASS III. MEASURES OF ACHIEVEMENT POTENTIAL AND INTELLECTUAL EFFICIENCY		
Capable, co-operative, efficient, organized, responsible, stable, and sincere; as being persistent and industrious; and as valuing intellectual ability and intellectual achievement.	13. Ac (achievement vs. conformance) To identify those factors of interest and motivation which facilitate achievement in any setting where conformance is a positive behavior.	Coarse, stubborn, aloof, awkward, insecure, and opinionated; as easily disorganized under stress or pressures to conform; and as pessimistic about their occupational futures.

HIGH SCORERS tend to be seen as:	SCALE AND PURPOSE	LOW SCORERS tend to be seen as:
CLASS III MEASURES OF ACHIEVEMENT POTENTIAL AND INTELLECTUAL EFFICIENCY (continued)		
Efficient, clear-thinking, capable, intelligent, progressive, planful, thorough, and resourceful; as being alert and well-informed; and as placing a high value on cognitive matters.	**15. Ie (intellectual efficiency) To indicate the degree of personal and intellectual efficiency which the individual has attained.**	Cautious, confused, easygoing, defensive, shallow, and unambitious; as being conventional stereotyped in thinking; and as lacking in self-direction and self-discipline.
Mature, forceful, strong, dominant, demanding, and foresighted; as being independent and self-reliant; and as having superior intellectual ability and judgement.	**14. Ai (achievement vs. independence) To identify those factors of interest and motivation which facilitate achievement in any setting where autonomy and independence are poritive behaviors.**	Inhibited, anxious, cautious confused, easygoing, defensive shallow, and unambitious; as being submissive and comliant before authority; and as lacking in self-insight and self-understanding.
CLASS IV. MEASURES OF INTELLECTUAL AND INTEREST MODES		
Observant, spontaneous, quick, perceptive, talkative, resourceful, and changeable; as being verbally fluent and socially ascendant and as being rebellious toward rules and restrictions, and constraints.	**16. Py (Psychological mindedness) To measure the degree which the individual is interested in, and responsive to, the inner needs, motives and experiences of others.**	Apathetic, peaceable, serious, cautious, and unassuming; as being slow and deliberate in tempo; and as being overly conforming and conventional.
Insightful, informal, adventurous, confident, humorous, rebellious, idealistic, assertive, and egoistic; as being sarcastic and cynical; and as highly concerned with personal pleasure and diversion.	**17. Fx (flexibility) To indicate the degree of flexibility and adaptability of a person's thinking and social behavior.**	Deliberate, cautious, worrying industrious, guarded, mannerly methodical and rigid; as being formal and pedantic in thought; and as being overly deferential to authority, custom, and tradition.
Appreciative, patient, helpful, gentle, moderate, persevering, and sincere; as being respectful and accepting of others; and as behaving in a conscientious and sympatheway.	**18. Fe (femininity) To assess the masculinity of interests. (High scores indicate more feminine interests, low scores more masculine.**	Outgoing, hard-headed, ambitious, masculine, active, robust, and restless; as being manipulative and opportunistic in dealing with others; blunt and direct in thinking and action; and impatient with delay, indecision, and reflection.

Harrison G. Gough, California Psychological Inventory, Consulting Psychologists Press Inc.

STUDY ATTITUDES AND METHODS SURVEY

Developed to measure normatively non-cognitive factors associated with success in academic pursuits, the SAMS provides information on the following:

Academic Interest-Love of Learning - The sheer pleasure gained by students in studying and in doing academic work, much like that experienced by the dedicated scholar who gains great satisfaction in working in the library, in writing papers and reading the great book - an intrinsic motivation involving love of learning for its own sake.

Academic Drive-Conformity - A combination of both (a) persistence, involving a high level of determination to succeed in academic work regardless of the amount of effort and time required and (b) a high degree of conformity insofar as it involves meeting institutional requirements and teachers' expectations - a form of extrinsic motivation that will enhance the status and prestige of the student in academically oriented activities.

Study Methods - A systematic, organized, methodical, and well-planned set of working habits and procedures in meeting assignments and in taking examinations; effective study skills and techniques resulting in the optimal use of time and ability.

Study Anxiety - A marked concern over doing well in school assignments and examinations that reflects a lack of self-confidence and self-assurance; a tendency to be fearful that one's level of competence in academic endeavors is not high enough, and to experience feelings of panic or even terror in taking examinations and in meeting the expectations of teachers and significant others in the academic setting.

Manipulation - An inclination to use power and influence to achieve one's goals and to enhance one's status even at the expense of the teacher or administrator; playing up to the teacher to gain favorable treatment or special consideration.

Alienation Toward Authority - A feeling of being isolated or rejected in the academic environment manifested by hostility toward the academic institution and its members - teachers, administrators, and significant others as well as resentment and even defiance of rules and regulations.

William B. Michael, Joan J. Michael and Wayne S. Zimmerman, Study Attitudes and Methods Survey, Manual of Instructions and Interpretations, 1980, Educational and Industrial Testing Service, San Diego, Ca.

Myers-Briggs Type Indicator (Form G)

This instrument is designed to assess both ipsatively and normatively one's self-reported personality style utilizing several dimensions of personality. These dimensions are extroversion-introversion, sensing-intuition, feeling-thinking, perceiving-judging. These dimensions are based upon Jung's individual personality typology and are defined as follows:

E. Extroversion - Personal orientation and focus upon the outer world of people and things.

I. Introversion - Personal orientation upon the inner abstractions or concepts and ideas.

S. Sensing - Becoming aware of things through the five senses.

N. INtuiting - Indirect perception with the focus on ideas, relationships, or associations derived from the things perceived.

F. Feeling - Focused primarily on the feeling, discriminating between valued and non-valued.

T. Thinking - Primary focus upon thinking discriminating between true and false on impersonal information.

P. Perceiving - primary focus is upon a perceptive process in responding to the external world.

J. Judging - Primary focus upon judging process e.g. true or false, good or bad, in responding to the external world.

The 16 combinations of the above produce descriptive statements about one's mode of preferred interaction and cognitive style. These are:

TYPE	TYPE
1. ESTJ	9. ENTJ
2. ISTP	10. INTP
3. ESFJ	11. ENFJ
4. ISFP	12. INFP
5. ESTP	13. ESFP
6. ISTP	14. ISFJ
7. ENTP	15. ENFP
8. INTJ	16. INFJ

A score shows how strong the preference is.

The scores run in both directions from the zero at the center, where the direction of the reported preference changes. The ranges are:

Extroversion	E 53 ----- 0 -----	I 59	Introversion
Sensing	S 67 ----- 0 -----	N 51	INtuition
Thinking	T 49 ----- 0 -----	F 51	Feeling (males)
	T 61 ----- 0 -----	F 49	(females)
Judging	J 55 ----- 0 -----	P 61	Perceiving

Isabel Briggs Myers, The Myers Briggs Type Indicator Manual, 1962 Consulting Psychologists Press; Palo Alto, California

The Modified Maslach Burnout Inventory

This was a modification of the Maslach with adaptation to the student situation. It was expected to produce an ipsative assessment of these components:

Emotional Exhaustion (intensity and frequency), Depersonalization (intensity and frequency), and Personal Accomplishment (intensity and frequency).

Emotional Exhaustion is defined as feelings of being emotionally over-extended and exhausted by one's studies and work.

Depersonalization is defined as unfeeling, and impersonal response towards one's activities, work, studies or others.

Personal Accomplishment is defined as personal accomplishment and achievement in one's work or study activities.

Christina Maslach and Susan Jackson, Maslach Burnout Inventory Research Edition, 1981, Palo Alto, Ca Consulting Psychologists Press, Inc.

Multiscore Depression Inventory

The inventory is designed to obtain an assessment normatively of the severity of self reported depression and provides a global rating of depression as well as subscale results on 9 aspects of depression. These are: guilt, irritability, pessimism, low self-esteem, cognitive difficulty, energy level (fatigue), sad mood, instrumental helplessness, and social introversion. A short form of the test was used.

David J. Berndt, PhD Assistant Director of Psychology Department of Psychiatry, Michael Reese Medical Center and Department of Psychiatry, University of Chicago, Chicago, Ill. The future publisher of the Multiscore Depression Inventory is the Western Psychological Services.

Beck Depression Inventory

This inventory is designed to assess clinical depression of serious magnitude in typical clinical populations (patients). It provides a singular global clinical depression score.

Beck Reference ?

COGNITIVE STYLES QUESTIONNAIRE

The Cognitive Styles Questionnaire was designed to describe ipsatively the manner in which one prefers to learn, how one prefers to deal with symbols which represent real things, how the quality of an experience affects one, how one reacts and copes with the environment, the type of situations one prefers, and how one prefers to handle or solve a problem. Responses to the questionnaire produces results on 28 individual scales clustered into 5 groups which are as follows:

How Do You Prefer To Deal With Symbols Which Represent Real Things?

This group includes four scales. They are the skills measured on tests like the S.A.T. or the S.C.A.T. tests. The elements are very important for success in school. However, we treat them differently in cognitive mapping than on an achievement test! Achievement tests measure **how well you do** in number and work skills. The cognitive map measures **how you prefer** to gain numeric and verbal information.

1. Language input by hearing. This scale measure how comfortable you feel learning by hearing spoken words. A major score tells us that you might enjoy taking a government or history course by radio or listening to a lecture. If you have a negligible score, though, you probably have a hard time learning in a lecture setting unless there are other learning tools for you to use.

2. Number relationships by hearing. A major on this scale tells us that you like to hear information about numbers and other symbols like musical notes. For example, you probably remember telephone numbers which you hear. If your score is a major, you are probably happy in a lecture about math.

3. Language input by sight. A major here says that you enjoy getting verbal meaning from information that your read. A history or English class with lots of reading would be a nice choice for you.

4. Number relationships by sight. If you are a major on this scale you prefer to gain meaning of number formulas, or musical notes by seeing them written or diagrammed. You might learn math well by reading a book.

The four scales measure different things. Many people are majors on more than one scale. You may have minor scores in three or four of these symbols scales. You probably do not have a negligible score on more than two scales even though it is possible and acceptable.

How Does The Quality Of An Experience Affect You?

The Five sensory input scales tell us how your senses affect you as you learn. For these scales we are concerned with the way you receive an idea, not the idea itself. For example, you may find out that studying with the radio helps you to learn, while it hurts a friend of yours. The senses we use in this part of your map are hearing, smell, taste, touch, and sight.

5. Input by sound. If you are a major on this scale, you probably are affected - positively or negatively - by "outside noises." You must decide which it is. If noise bothers you when you study, find a quiet place. Use an individual study carrel in the library. Close the door if outside noise is a problem. Students talking nearby might interfere with your learning. You might need to ask them not to talk during a lecture. If you are listening to the radio, be sure that it is properly tuned. If you make tape recordings of you classes, make sure the sound quality is good!

6. Input by smell. Some people learn a great deal by smell. Others are distracted by strong odors. If you notice odors in either of these ways, you probably scored a major on the input by smell scale. Your major score tells us that you often can tell things apart by their smells. You should use this ability to learn to recognize items. It is a good idea for you to use the sense of smell when you are learning. On the other hand, if your score is negligible, you might have a tough time telling a skunk from a rose.

7. Input by taste. In some ways, taste is like smell. If your score on this scale is major, you probably can tell things apart by their taste. This is a skill which often comes in handy but must be used carefully. Be sure you know if it is all right to taste something. Many "taste Majors" carry gum, candy, or cigarettes because they learn better with something to chew. Think about having a cup of coffee close while you study. That may make it easier for you to learn. If you scored negligible on this scale, we would not expect you to be able to tell Pioneer Chicken from the Colonel in a blind taste test.

8. Input by touch. Can you tell the difference between silk and rayon? If so, you are probably a major on the touch scale. This means that you should feel things in order to compare them whenever possible. Feel the textures and feel the shapes. Try to learn about an object with your eyes closed. You will find out a great deal by doing this. A minor or negligible score tells us that feeling things will not help you learn very much. If you have to learn by feel,try to use sight, sound, taste smell also.

9. Input by sight. If you scored a major on this scale, you can learn alot by watching the world around you. But you have to be careful. You might "see too much." This means that you may have a hard time sorting out important sights from ones that are not as important. When you watch television, you need a sharply focused picture. You might be uncomfortable if there is a ghost on the screen. Try to have your antenna adjusted. When you see a film in class, be sure the picture is in focus. If it is not, ask you teacher to fix it or offer to fix it yourself. If your teacher uses the chalkboard and it is not very clean, erase it. If you cannot see what was written on the board before, you will see better what is there now. When you choose a book at the library, make sure the visuals are good and the print is clear.

BY WHAT MEANS DO YOU REACT TO YOUR ENVIRONMENT?

These eleven "means" form a "mixed bag." We use many of the situations described in class. The others can affect your learning as well.

10. Coordination of thoughts or actions. This is sometimes called the "sixth sense." If this factor is a major on your map, it is important for you to see how the parts of a process fit together. For example, if you wish to learn how to type, you should watch a typist as well as practice typing. Observation is the key to this factor. When you perform a task, you probably look good at it.

11. Awareness of feelings of others. This is one of the most clear-cut scales. It measures your ability to place yourself in another person's shoes. If you are a major, you must be careful about becoming too personally involved with the problems of friends and classmates. This can have an effect on how well you study. In a seminar you might be able to express your opinion by seeing other viewpoints as well.

12. Enjoyment of beauty. This scale includes different types of beauty - ideas, buildings, prose, and poetry, music, painting, and so forth. We have found that majors on this scale decide for themselves what "beautiful" means. Each person uses a different set of rules. Most people who are majors are happier when they study in a "beautiful area." These people tend to put pictures on the walls or decorate their study areas in other ways. If you are a major on this scale, help yourself by selecting the book with the "prettiest" type style, charts and pictures when your teacher gives you a choice.

13. Commitment to personal principles. If you lead you life by a set of your own rules, you probably have a major on this scale. For example, if you are very careful about obeying the law, perhaps you stop at every stop sign at three in the morning, then you live by a firm set of rules. The rules of two majors may not be the same. Pickpockets may not work in each other's territories. That rule is very different from the rules a priest uses. If you are a minor or negligible on this scale, pay extra attention to the rules of each classes you take. This will help you succeed in you class.

14. Sense of the dramatic. For many people, role playing is a great way to learn. Role playing is displaying an emotion not really felt. If you scored a major in this factor, you are probably one of these people. You can role play to understand relationships and processes. On the other hand a minor or negligible score tells us that role playing is not a very effective learning tool for you. It may even be a tool which is upsetting to you. If this is true, ask your teacher if there are ways other than role playing to learn what is being taught.

15. Use of non-verbal language. Lots of information is given by facial expressions and hand movements instead of words. If you are a major on this scale, you are tuned to this way of "talking". You will learn more easily if you can see this body language. You probably use it to "talk" as well. Try to sit near the front of the room if your teacher is a lecturer. If you scored a minor or negligible, you do not get alot of information from body language. By making special effort to look for expressions you may get a bonus in your learning.

16. Use of physical activity. We know that if you are a major on this scale, it is important for you to practice the skills you are trying to learn. For some minors and negligibles, this is not as important.

17. Knowledge of proper social distance. Do you know whom to call by his or her first name? If so, you are probably a major on the social distance scale. We would expect you to know also how far to stand from a person when talking. If you are a minor or negligible on this scale, pay particular attention to how people enter conversations and how far apart they stand. Be careful about becoming too familiar with people for whom this is not right.

18. Knowledge of self. This is a clear-cut scale. Do you know how you work? If you do, you probably are able to set realistic goals for yourself. The information on you map is probably correct and you probably scored a major on this scale. A smaller score indicates that you don't understand yourself very well. You must be careful of the results of your cognitive map.

19. Use of persuasion. Your major on the persuasion scale tells us that you might be comfortable in a situation where you must convince others of your viewpoint like the give and take of a small discussion. A minor or negligible score tells us that you would be uncomfortable as a door to door cookware vendor.

20. Awareness of time. Do you get upset when you are "running late" or a friend is? Do you know how long it takes to get from home to school? Can you tell the time without looking at watch? If you answered "yes" to any of these questions, you are probably a major on timeliness. If you are not too worried about the time, "you'll get there when you get there," your score is in the minor or negligible range. In this case, you should realize that some classroom activities may go on before you get to class. This could hurt your learning if you don't make an extra effort to be on time.

Which Situation Do You Prefer

Who influences you in decision making? These three scales measure how much you rely on different groups of people and how you prefer to work.

21. Working with friends. How much are you influenced by close friends outside your family? If you are greatly influenced, you are a major. You might be comfortable in a small group setting like a psychology seminar or a history seminar section. You would be a good candidate for peer tutoring if you need help in a class. You might also make a good tutor for those classes in which you excel. If your score is negligible, it is more likely that you would be happier in some other classroom setting.

22. Working under direction. Some people like to know exactly what is happening. They need to know "how many pages should my term paper be?", or "about what topic should my essay be written?" If you are a major, this describes you. To help you make decisions, you probably consult members of the family, a teacher or member of the clergy or leaders on you community. You should consider a lecture class as a good learning choice if the teacher gives very specific instructions about his requirements. A minor or negligible score tells us that figures of authority do not help you make decisions and that you do not need "clear-cut rules of the game."

23. Working independently. If you like to be given a problem and then be left alone to solve it, you are probably a major on the independent activities scale. You might enjoy courses by radio, television or the newspaper. Perhaps independent study contracts are good for you. If you find yourself in a group setting, you might enjoy being the group leader. If you scored negligible on this scale, you probably should find a situation where more direction is available to guide your studies.

How Do You Solve A Problem?

The last five scales measure the ways in which we make inferences or solve problems, that is, the way we think. Often people have several styles of thinking, using the best style for a specific problem.

24. Reasoning by applying rules. Do you accept or reject an idea because of the way it fits into a bigger system? A major on this scale tells us that you do. You understand things best when you know the underlying policy which governs them. Definitions are also important to you.

25. Reasoning by looking for differences. If you are a major on this scale, you like to find the differences between items or ideas. You probably ask, "What if....?" frequently. We find that artists, writers, and musicians often use this type of reasoning.

26. Reasoning by looking for similarities. In a sense, this scale is the opposite of the previous one. Here, we are measuring comparison. If you are a major in this area, we expect you to look for similarities between objects or ideas. You probably often say, "These are alike because.... ."

27. Reasoning by weighing all factors. Majors in this category tend to use all three of the preceding techniques. If you are a major here you also may a major in items 24,25 and 26. You probably give each of the above three techniques equal weight when you make a decision. Because of this, you need more information than a minor or negligible does. This means you will take more time to make up your mind.

28. Reasoning by deduction. If you think you're good in math, you're probably a major on this scale. You enjoy syllogisms and Sherlock Holmes' style of logic., If you are a minor or negligible, you do not feel a need for mathematical reasoning.

Joseph E. Hill, The Educational Sciences-A Conceptual Framework, 1981, West Bloomfield, Mi., Hill Educational Sciences Research Foundation.

GLOSSARY OF COGNITIVE STYLE TERMINOLOGY

1.	T(AL)	Language input by hearing: preference for learning by symbolic verbal information which is spoken.
2.	T(AQ)	Number relations by hearing: preference for learning symbolic numerical or technical information which is spoken.
3.	Y(VL)	Language input by sight: preference for reading verbal symbolic information.
4.	T(VQ)	Number relations by sight: preference for reading mathematical or technical information.
5.	Q(A)	Input by sound: enjoyment of perception via the ear. A major indicates that the individual might learn well form or get interference from auditory stimuli.
6.	Q(O)	Input by smell: enjoyment of perception by smell. The major can learn via smell by odors might also interfere with learning.
7.	Q(S)	Input by taste: enjoyment of perception by taste. Majors often learn better when they have something to chew.
8.	Q(T)	Input by touch: enjoyment of perception by touch. Feeling objects can help or hinder the major as he/she learns.
9.	Q(V)	Input by sight: enjoyment of perception via the eye. The major needs a well focused image. Visual complexity can be distracting.
10.	Q(P)	Coordination of thought or ideas: desire to synthesize complex acts from a series of simple ones. The major often likes to see an action before attempting it.
11.	Q(CEM)	Awareness of feelings of others: preferences for learning by placing oneself in the shoes of another. The major should be cautious about balancing empathy and rationality in problem solving.
12.	Q(CES)	Enjoyment of beauty: involving esthetics in the learning process. Each person establishes his/her own standard.
13.	Q(CET)	Commitment to principles: preferring to live by a consistent set of rules, nor necessarily similar to anyone else's.
14.	Q(CH)	Sense of the dramatic: preference for learning by using dramatic flair, by role playing or by watching others play roles.
15.	Q(CK)	Use of nonverbal language: preference for learning by observing or using body language. The major should sit in class where he/she can see the instructor's body language.
16.	Q(CKH)	Use of physical activity: involving the musculature in the learning process. Majors may learn better by taking notes whether or not they ever read them back.
17.	Q(CP)	Knowledge of proper social distance: comfort in entering a conversation, knowing how to address various people.
18.	Q(CS)	Knowledge of self: feeling for personal goals. A low score on this factor indicates that care should be taken in believing the remainder of an individual's map.
19.	Q(CT)	Use of persuasion: preference for learning by convincing others or being convinced by others of differing viewpoints.
20.	Q(CTM)	Awareness of time: preference for budgeting time, concern for timeliness.
21.	A	Working with friends: preference for working with a small group (as small as 1) of peers.
22.	F	Working under direction: preference for working under the direction of an authority figure who provides highly structured directions.
23.	I	Working independently: preference for working alone, under as few constraints as possible.
24.	M	Reasoning by applying rules: preference for using an existing structure and categorizing to solve problems.
25.	D	Reasoning by looking for differences: preference for contrasting elements of a problem.
26.	R	Reasoning by looking for similarities: preference for comparing elements of a problem.
27.	L	Reasoning by weighing all factors: combining the preceding three elements to make a decision. This individual tends to want more information than is available, thus making decisions slowly.
29.	(K)	Reasoning by deduction: preference for using Sherlock Holmes type of reasoning.

MAJOR	An element of learning style which is **usually** preferred. Scores from 28-40
MINOR	An element of learning style which is **sometimes** preferred. Scores from 16-26
NEGLIGIBLE	An element of learning style which is **seldom** preferred. Scores from 8-14

Note These are not rigorous definitions! They are only ideas about the vocabulary.

K-12 Questionnaire

This questionnaire was designed to obtain as complete a picture of the experiences of MGM-GATE students during their K-12 experiences. A total of 66 questions were asked regarding such issues as when they were identified, evaluation of their educational experiences to the impact of being identified as MGM-GATE upon their self-evaluation or self esteem. (see attached questionnaire)

K-12 QUESTIONNAIRE

Name _____ Student ID # _____

1. Age? [ ] 17 [ ] 18 [ ] 19 [ ] 20 [ ] 21 [ ] 22+

2. Sex [ ] Male [ ] Female

3. Ethnic Origin [ ] 1)American Indian [ ] 2) Asian [ ] 3) Black
   [ ] Filipino [ ] 5) Hispanic [ ] 6) White Caucasian [ ] 7) Other

4. a) Father work? [ ] Yes [ ] No
   b) Occupation _____

   c) Mother work? [ ] Yes [ ] No
   d) Occupation _____

   e) Father's education? yrs. _____
   f) Mother's education? yrs. _____

5. Family income: _____

6. Birthplace: _____

7. Number of school attended. _____

8. Number of times you (and your family) moved. _____

9. Work experience. [ ] 1) yes [ ] 2) no

10. If you answered YES to item 9, how many jobs?_____

11. Greatest length of time on any job. _____

12. Did you do any volunteer work? [] 1) yes [ ] 2) no

13. At what age were you identified for a special program such as GATE or MGM? _____

14. What grade level were you in when identified? _____

15. Did you enter a GATE/MGM program? [ ] 1) yes [ ] 2) no

16. Did you enter a Resource Program? [ ] 1) yes [ ] 2) no

17. Reflect on your prior school experiences and identify at what grade level you experienced the greatest difficulty. (enter grade level number) _____

18. What was the cause of your time of greatest difficulty? _____
    _____

Rate the following areas as to how much each contributed to your difficulty in item 17 above.

	None	Some	Greatly	Very Greatly
19. School	[ ] 0	[ ] 1	[ ] 2	[ ] 3
20. Peers	[ ] 0	[ ] 1	[ ] 2	[ ] 3
21. Family	[ ] 0	[ ] 1	[ ] 2	[ ] 3
22. Teachers	[ ] 0	[ ] 1	[ ] 2	[ ] 3

23. Other (specify) _____

Please evaluate your educational experiences on the following areas and categories.

Elementary School (1-6 grades)

24. Quality of educational experience:

Very Low	Low	Mediocre	High	Very High
[ ]1	[ ]2	[ ]3	[ ]4	[ ]5

25. Types of learning experience:
[ ] 1) hands on
[ ] 2) independent projects
[ ] 3) teacher to group presentation

26. Classroom experience:
[ ] 1) rote or repetitive
[ ] 2) self-directed
[ ]3) formally structured

Junior High School: (7-9 grades)

27. Quality of educational experience:

Very Low	Low	Mediocre	High	Very High
[ ]1	[ ]2	[ ]3	[ ]4	[ ]5

28. Types of learning experience:
[ ] 1) hands on
[ ] 2) independent projects
[ ] 3) teacher to group presentation

29. Structure of experience:
[ ] 1) rote or repetitive
[ ] 2) self-directed
[ ]3) formally structured

High School: (10-12 grades)

30. Quality of educational experience:

Very Low	Low	Mediocre	High	Very High
[ ]1	[ ]2	[ ]3	[ ]4	[ ]5

31. Types of learning experience:
[ ] 1) hands on
[ ] 2) independent projects
[ ] 3) teacher to group presentation

32. Structure of experience:
[ ] 1) rote or repetitive
[ ] 2) self-directed
[ ]3) formally structured

33. Rate the significant people on each of the six characteristics using the 1 thru 5 scale.

Low		Medium		High
1	2	3	4	5

34. Level of competency:	Teachers	Father	Mother	Significant other indicate relationship:
35. Encouragement of intellectual capabilities				
36. level of emotional support				
37. Consistency of expectations				
38. Honesty and genuineness				
39. Valued responsibility and independence				

40. Did your view of school change after involvement in the GATE/MGM program? [ ] 1) yes [ ] 2) no

41. How did your level of self-esteem change after involvement in the program? [ ] 1) Lower [ ] 2) No Change

42. Do you have a best friend? [ ] 1) yes [ ] 2) no

43. Do your friendships typically end on good terms? [ ] 1) yes [ ] 2) no

44. Do you have a career choice? [ ] 1) yes [ ] 2) no

If you answered "yes" on 44:

45. Did you select carefully your career of choice? [ ] 1) yes [ ] 2) no

46. Was this you first choice? [ ] 1) yes [ ] 2) no

47. If you answered "no" to 46, what prompted you to change from your career choice? _____

48. Did your parents have career expectations for you? [ ] 1) yes[ ] 2) no

49. Do you think that you were treated differently from the majority of students in your school? [ ] 1) yes [ ] 2) no

50. Do you think that was : [ ] 1) an advantage [ ] 2) a disadvantage?

51. Do you have a "sense of purpose" in your life? [ ] 1) yes [ ] 2) no

52. Do you feel that you will contribute to society?
[ ] 1) yes [ ] 2) no

53. Have you ever been frustrated or disappointed because other students did not listen to what you had to say or were not interested in your topic of conversation? [ ] 1) yes [ ] 2) no

54. Have you ever been made head of a committee and then rejected the whole project? [ ] 1) yes [ ] 2) no

55. Have you ever flunked a test for the purpose of harassing the teacher? [ ] 1) yes [ ] 2) no

56. Have you ever found it unacceptable to seriously prepare for a test or quiz until you found out what the the teacher was expecting? [ ] 1) yes [ ] 2) no

57. Have you found by experience that you could "bully" the teacher(s) into giving you a higher grade either by confrontation of by exposing their information inadequacies? [ ] 1) yes [ ] 2) no

58. Did you ever seriously consider dropping out of high school or going to a continuation high school? [ ] 1) yes [ ] 2) no

59. Did you experience a real distinct gap in you ability to understand and be interested in complex ideas and the ability to write these thoughts on paper? [ ] 1) yes [ ] 2) no

60. Have you been able to B.S. your way through an essay examination using prior knowledge rather than information obtained from assigned material or text? [ ] 1) yes [ ] 2) no

61. Did you become bored with school beginning in the sixth grade or beginning in Junior High School? _____

62. Do you tend to associate with others who were unable to stand or sustain interest in school? [ ] 1) yes [ ] 2) no

63. Do you strongly object to the use of multiple choice or true/false tests? [ ] 1) yes [ ] 2) no

64. Do you find it more fun to beat the "system" than to go with the "system"? [ ] 1) yes [ ] 2) no

65. Do your find yourself more intellectually stimulated at home than you do at school? [ ] 1) yes [ ] 2) no

66. Do you tend to get "A's" and "B's" and "D's" and "F's" all at the same time? [ ] 1) yes [ ] 2) no

Student Academic Maintenance Study Questionnaire

This questionnaire is a set of specific items that discriminate between students who are most apt to drop or reduce their study load. Most of the items were determined to be critical predictors of the probability of study load reduction. It consisted of items covering such personal data as the amount of emotional and financial support from significant others to the strength of a student's motivation to persevere in their academic endeavors.

STUDENT ACADEMIC MAINTENANCE STUDY

Dear Student:

The information gathered by this questionnaire is part of a research project aimed at determining factors leading to the necessity, by some students, to reduce their initial unit load by one or more courses. If the research results prove significant, it could help students and counselors when students are selecting their programs.

We need your name and address in case we would like you to help us further in this study.

YOUR PARTICIPATION IS COMPLETELY VOLUNTARY. ALL ANSWERS WILL BE HELD IN THE STRICTEST CONFIDENCE.

This Questionnaire is Only For Students Up to and Including Twenty-one Years of Age. If you are Over Twenty-one Please do not Participate.

DIRECTIONS: Please fill in the appropriate [ ]

Name _____
Last First Middle Init.

Address _____
Street City Zip

Student ID # _____ Sex: M [ ] F [ ]

1. What is your present age?
   17 .....[ ]
   18.....[ ]
   19.....[ ]
   20.....[ ]
   21.....[ ]

2. What is your marital status?
   Single.....[ ] Divorced....[ ]
   Married....[ ] Separated...[ ]

3. What is your current semester?
   First.....[ ] Fourth.....[ ]
   Second.....[ ] Fifth or more.[ ]
   Third.....[ ]

4. How many units are you enrolled in this semester?
   1-6.....[ ] 12-14.....[ ]
   7-11.....[ ] 15 or more..[ ]

5. Have you ever found it necessary to drop a course?
   No.....[ ] Yes.....[ ]

6. If you answered YES to question 5, please indicate each semester you dropped a course.
   First.....[ ] Fourth.....[ ]
   Second.....[ ] Fifth or more.[ ]
   Third.....[ ]

7. Where do you live during the school year?
   At home with family or spouse.[ ]
   With a roommate(s).....[ ]
   By yourself.....[ ]

8. What best describes your source of income?
   Almost totally from family.....[ ]
   Combination of family and self..[ ]
   By yourself.....[ ]

9. How many hours a week are you usually employed at a job?
   None.....[ ] Between 21-30 hours..[ ]
   Up to 10 hours.....[ ] Between 31-40 hours..[ ]
   Between 11-15 hours...[ ] Over 40 hours.....[ ]
   Between 16-20 hours...[ ]

10. Would you Increase, Decrease, or just Maintain your current number of job hours if you had a choice?
   Increase.[ ] Maintain.[ ] Decrease.[ ]

11. What best describes your weekly recreational time?(dating, going out with friends for fun and relaxation)
   Go out less than once a week.....[ ]
   Usually go out once a week.....[ ]
   Usually go out twice a week.....[ ]
   Usually go out three times a week....[ ]
   Go out more than three times a week..[ ]

12. How would you describe your ability to meet all your school and personal expenses this semester?
   More than adequate....[ ] Barely adequate....[ ]
   Adequate.....[ ] Inadequate.....[ ]

13. What was the highest level of formal education attained by your parents?

	Mother	Father
Less than High School.....	[ ]	[ ]
Some High School.....	[ ]	[ ]
High School Graduate.....	[ ]	[ ]
Some College.....	[ ]	[ ]
College Graduate.....	[ ]	[ ]
Unknown.....	[ ]	[ ]

14. What was your High School Grade Average?

A [ ]	B [ ]	C [ ]	F [ ]
A- [ ]	B- [ ]	C- [ ]	
B+ [ ]	C+ [ ]	D [ ]	

15. What is you current **College Grade Average?**
(Do not answer if this is your first semester.)

A [ ]	B [ ]	C [ ]	F [ ]
A- [ ]	B- [ ]	C- [ ]	
B+ [ ]	C+ [ ]	D [ ]	

16. How do you feel about your college academic performance?

Not sure.....[ ]	Moderately satisfied.[ ]
Dissatisfied.....[ ]	Very satisfied.....[ ]

17. Please rate the following concerns or problems.

	often	smtimes	rarely
Worried about car or transport?.....	[ ]	[ ]	[ ]
Do you worry about grades?.....	[ ]	[ ]	[ ]
Are you without close friends?.....	[ ]	[ ]	[ ]
Do you worry about enough study time?.	[ ]	[ ]	[ ]
Difficulty motivating self to study?..	[ ]	[ ]	[ ]

18. How would you describe your parents and/or spouse's feelings towards you attending college?

Unknown.....[ ]	
Not very supportive.....[ ]	
Moderately supportive.....[ ]	
Highly supportive.....[ ]	

19. Are you under strong parental pressure to:

	Yes	No	Not sure
Be a full time student? (12 units)..	[ ]	[ ]	[ ]
Meet more of your personal expenses?	[ ]	[ ]	[ ]
Get out on your own?.....	[ ]	[ ]	[ ]

20. Are you enrolled in a Certificate or Vocational Program?

Yes.....[ ]	No.....[ ]

21. If you answered YES to question 20, please answer the following question:
If you found a good full time job in your field before finishing the program would you:

Try to maintain all your classes?.....[ ]	
Probably drop some classes?.....[ ]	
Probably withdraw from school?.....[ ]	

22. How important to you are the following?:

	Very Imp.	Smwhat Imp.	Not Imp.
Getting a good full time job..	[ ]	[ ]	[ ]
Graduating from college.....	[ ]	[ ]	[ ]
Transfering to 4 year school..	[ ]	[ ]	[ ]

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